

SEQUENCE LISTING

<110> Gala, Jean-Luc
Irenge, Leonid

<120> Assay for detecting and identifying micro-organisms

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<140> PCT/EP2005/002927

<141> 2005-03-18

<150> BE 2004/0152

<151> 2004-03-19

<160> 479

<170> PatentIn version 3.3

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<211> 597

<212> DNA

<213> Enterococcus Faecalis

<400> 1

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aacgtgtatc agggattaca aacttgatc taaactcgat tgacgtgtta agtggtttag      360
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caagcttgaa agaattaagc cgctgtaaac cagtttatga agaattacca ggttggtctg      480
aagatatcac tggttgcaaa actttagccg atttaccagc taatgctcgt aactatgtgc      540
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<210> 2

<211> 597

<212> DNA

<213> Enterococcus gallinarum

<400> 2

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aagatattac tggatgcaaa acattagctg atcttcctga aaatgcacgt aactatgtac	540
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<210> 3
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 <213> *Enterococcus flavescens*

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 <223> n is a, c, g, or t

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 <212> DNA
 <213> Streptococcus sanguis

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 ccaacagaac tttttgatga ggttgggtgac cgtattcgtg agattggtaa agagtatggt 240
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<210> 6
 <211> 598
 <212> DNA
 <213> Enterococcus faecium

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 <223> n is a, c, g, or t

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 ctagtctgga acagctcaag cgctgcaagc cgatttacga agagctgcca ggctggtcag 480
 aggacatcac tggagtcgc agtctggaag acttgccaga aaatgcccg t aactatgttc 540
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<210> 7
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 <212> DNA
 <213> Enterococcus durans

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<210> 8

<211> 597

<212> DNA

<213> Streptococcus pyogenes

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<210> 9

<211> 599

<212> DNA

<213> Streptococcus pneumoniae

<400> 9

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 attgacaagg ttgtaggtgt atgtaaagct tatacgagtc gtgtaggaga tggtcctttc 180
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<210> 10
 <211> 598
 <212> DNA
 <213> *Streptococcus oralis*

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 attgacaagg ttgtagggtg ctgtaaagcc tacacaagtc gtgtaggaga tggaccgttc 180
 ccaactgaat tatttgatga agtgggagat cgcattccgtg aagtaggtca tgaatatggt 240
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 gctagtcttg agcagttgaa acgttgtaag ccaatctacg aggaattgcc aggttggtca 480
 gaagacatca ctggagtcg taatttgaa gaccttcctg agaatgcacg caactatggt 540
 cgtcgtgtaa gcgagttggt tgggtgttcgt atctcaactt tctcagttgg gccagatc 598

<210> 11
 <211> 598
 <212> DNA
 <213> *Staphylococcus hominis*

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 gtatctaaag tgattgggggt atgtaaatcc tatacatctc gtgtaggtga cggcccattc 180
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 gaagacatta caggttgctg tacattagaa gaattacctg aaaacgcacg taaatactta 540
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<210> 12
 <211> 560

<212> DNA
<213> Bacillus anthracis

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<223> n is a, c, g, or t

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aatgcgatgg gaaagttatc gatgaagttc cagcaaactt aaacatttta gcgaaatgtg 420
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aattatctat gttctcagtg 560

<210> 13
<211> 560
<212> DNA
<213> Bacillus anthracis Butare

<400> 13
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gcatatacaa gccgcggttg tgatgggtcca ttccctactg agttcatga cgaaattggg 180
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aaatgcgatg ggaaagttat cgatgaagtt ccagcaaact taaacatttt agcgaaatgt 420
gagcctgtat acgaagagct tccagggttg acagaagata ttactggtgt aagatcatta 480
gatgagcttc ctgaaaatgc acgaaaatac gtagaacgtg tttctgagtt aacaggaatt 540
caattatcta tgttctcgtg 560

<210> 14
 <211> 560
 <212> DNA
 <213> Bacillus anthracis Sterne

<220>
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 <222> (8)..(8)
 <223> n is a, c, g, or t

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<210> 15
 <211> 560
 <212> DNA
 <213> Bacillus anthracis

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 <223> n is a, c, g, or t

<220>
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 <222> (552)..(552)
 <223> n is a, c, g, or t

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 <223> n is a, c, g, or t

<220>
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<222> (558)..(558)
 <223> n is a, c, g, or t

<220>
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 <222> (560)..(560)
 <223> n is a, c, g, or t

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<210> 16
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 <212> DNA
 <213> Bacillus anthracis

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 <223> n is a, c, g, or t

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 <223> n is a, c, g, or t

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<220>
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 <222> (556)..(556)
 <223> n is a, c, g, or t

<400> 16

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<210> 17
 <211> 560
 <212> DNA
 <213> Bacillus anthracis

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 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (6)..(6)
 <223> n is a, c, g, or t

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gagcctgtat acgaagagct tccaggttgg acagaagata ttactggtgt aagatcatta	480
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<210> 18
 <211> 557
 <212> DNA
 <213> *Bacillus cereus*

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 <222> (2)..(2)
 <223> n is a, c, g, or t

<220>
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 <222> (4)..(4)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (553)..(553)
 <223> n is a, c, g, or t

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 gtgaagttgg tcgcgagtat ggaacgacaa ctggtcgtcc acgccgcgta ggttggttcg 240
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 gcgaagttat tgatgaagtt ccagctaact taaacatttt agcgaaatgt gagcctgtat 420
 atgaagagct tccaggttgg gaagaagata ttactgggtg aaaatcatta gatgaacttc 480
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<210> 19
 <211> 551
 <212> DNA
 <213> *Bacillus cereus*

<220>
 <221> misc_feature
 <222> (545)..(545)
 <223> n is a, c, g, or t

<400> 19

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ttggtgatgg tccattccct actgagcttc atgatgaaat tggatcatcaa attcgtgaag    180
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acgttttaac aggtattcca actcttaaaa tttgtgtagc ttacaaatac aatggcggaag    360
ttattgatga agttccagct aacttaaaca ttttagcgaa atgtgagcct gtatatgaag    420
agcttccagg ttgggaagaa gatattactg gtgtaaaatc attagatgaa cttcctgaaa    480
atgcacgaaa atacgtagaa cgtgtttctg agttaacagg aattcaaata tctatgttct    540
cagtnggccc c                                                                551

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<210> 20
<211> 598
<212> DNA
<213> Bacillus megatherium

```

```

<400> 20
ctattcgaag gggcacaagg tgttatgtta gatatcgatc aaggaacata tccatttggt      60
acatcttcaa acccagtagc ggggtggagta acaattgggt ctggggtagg tccatctaaa    120
atcaaacacg ttgtaggtgt atcaaaagcg tatacaactc gtgttggtga cggccctttc    180
ccaactgaat taacaaacga aatcggtgat caaatccgtg aagtaggacg tgaatatggt    240
acaacaactg gtcgtcctcg ccgtgtaggt tggttcgaca gtgtagttgt acgtcatgct    300
cgtcgcgtta gtggaatcac agatctatct ttaaactcaa ttgatgtatt aacgggaatt    360
gagacattaa agatttgctg agcttatcgt tataaagggg aagttatgga agaattccct    420
gctagcttaa aaacacttgc agagtgcgaa cctgtatatg aagagcttcc aggttggaaca    480
gaagatatta cgggtgtgaa aacattagat gagttacctg ataacgctcg ccactactta    540
gagcgcgtgt ctcaattaac aggtattcct ttatctatct tctcagtagg tccaggcc      598

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```

<210> 21
<211> 598
<212> DNA
<213> Enterococcus casseliflavus

```

```

<220>
<221> misc_feature
<222> (11)..(11)

```


<223> n is a, c, g, or t

<400> 21

```
tattcgaagg nagctcaagg cgtgatgctg gatatcgacc aaggaaccta tcctttcgtg      60
acatcatcca accccgttgc tggaggtgtc accatcggtg gtggtgtggg tccttcaaaa      120
atcaacaaag tcgttggtgt ctgcaaagct tacacctctc gggtaggaga tggtcctttc      180
ccaacggaac tgtttgatga aacaggtgaa caaatcgtg agatcggtcg tgaatacggg      240
acaacgacag gacgtcctcg ccgtgtgggc tggtttgata ccgtcgtgat gcgccattca      300
aaacgggtct cagggatcac gaatctatcc cttaactcga tcgatgtctt gagcggctta      360
gaaaccgtga agatctgtac ggcttatgaa ctagacggcg aattgatcta tcattacca      420
gcaagcttga aagagttgaa ccgtgcaaa ccagtctacg aagaacttcc tggctgggtct      480
gaagacatta ctggctgcaa aacattagca gatctgccag aaaatgcacg caattacggt      540
caccgcatct ctgaattagt cgggtgtccgc atttcgacct tctcagtagg tccagacc      598
```

<210> 22

<211> 598

<212> DNA

<213> *Enterococcus raffinosus*

<400> 22

```
ctatttgaag gtgctcaagg cgttatgctg gatattgatc aaggaaccta tccatttggt      60
acttcttcga acccagttgc cgggtggggtg actatcggtg gtggtgtagg acctgctaaa      120
atcgacaaag ttgtcgggtgt ttgtaaagcc tatacttcac gcgtaggtga tggacctttc      180
ccaactgaat tgtttgatga agttggagat cagattcgtg aagtcggtcg tgaatatgga      240
acgactactg gtcgtccacg tcgtgtgggc tggtttgact cggttgtgat gcgtcattca      300
aaacgtgttt ctgggattac gaatctttct ttaaactcga ttgatgtctt gagcgggtctg      360
gatacagtga aaatttgtac agcgtatgag ctggacggag aactaattta ccattatcca      420
gcaagcctaa aagaattaaa tcgttgtaag cccgtttatg aagaactacc tggttggagc      480
gaagatatta caggctgccg tgatttagct gatctaccgg aaaatgcgcg taattatgta      540
cgtcgcgttt ctgaacttgt ggggtgtgcgt atctcgacct tctcagttgg tcctggtc      598
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<210> 23

<211> 598

<212> DNA

<213> *Staphylococcus aureus*

<400> 23

ctatttgaag gggcacaagg tgtaatgtta gatatcgacc atggtacata tccattcggt	60
acatcaagta atccaattgc aggtaacgtt actgttggtta cagggtgtagg tcctacattc	120
gtttcaaagg taattggtgt atgtaaagct tatacatcac gtgttggtga tgggtccattc	180
cctactgaat tattcgatga agatggacat catattagag aagttgggtcg tgaatatggt	240
acaacaacag gacgtccacg tcgtgtaggt tggtttgatt cagttgtatt acgtcactct	300
cgtcgtgtaa gtggtattac agatttatct attaactcaa tcgatgtttt aacaggccta	360
gacacagtga aaatctgtac agcttatgaa ttagacggta aagaaattac tgagtaccca	420
gcaaacttag atcaattaaa acgttgtaaa ccaatctttg aagagttacc aggttggaca	480
gaagacgtaa caagtgtgcg tacttttagaa gaattacctg aaaatgcacg taaatattta	540
gagcgtattt cagaattatg taatgtacaa atttctatct tctcagtagg tccaggcc	598

<210> 24
 <211> 598
 <212> DNA
 <213> *Staphylococcus epidermidis*

<400> 24	
ctcttcgaag gtgctcaagg tgtcatgtta gatatcgacc atggtacata tccattcggt	60
acatctagta atccagttgc aggtaacgtt acagtaggta cagggtgttg ccctacatca	120
gtgtctaaag tgattggtgt atgtaaatca tatacatctc gtgtaggtga cgggtccattc	180
ccaactgaac tttttgatga agatggccac catattagag aagtgggtcg tgaatatggt	240
acaactactg gacgtccacg tcgtgtaggt tggttcgact cagttgtatt acgtcattca	300
cgtcgtgtaa gtggtatcac agatctttca attaactcaa tcgacgtttt aacaggatta	360
gacacagtta aaatttgtac tgcttaogaa ttagatggtg aaaaaattac tgaataccca	420
gcaaacttag atcaattaag acgttgtaaa cctatcttcg aagagcttcc aggttggact	480
gaagacatta caggttggtc tagtttagat gaacttctcg agaatgcacg taattactta	540
gagcgtattt cagaattatg cgggtgccat atttcaatct tctcagtagg tcctggtc	598

<210> 25
 <211> 567
 <212> DNA
 <213> *Streptococcus mitis*

<220>
 <221> misc_feature
 <222> (11)..(11)

<223> n is a, c, g, or t

<400> 25
tatggctagc natagaccaa ggtacgtatc catttggttac gtcacaaac cctgtggctg 60
gtggtgttac gattggttct ggtgttggtc caagtaagat tgacaagggt gtaggtttat 120
gtaaagccta tacgagtcga gtaggagacg gtcctttccc aactgaattg tttgatgaag 180
tgggagaacg tatccgtgaa gttgggtcatg aatatggtac aacaactggt cgtccacgtc 240
gtgtgggttg gtttgactca gttgtgatgc gtcatagtcg tcgtgtttct ggtattacta 300
atctttcatt gaactctatc gatgttttga gtggtttaga tacagtgaag atctgtgtgg 360
cctatgatct tgatggtcaa cgtattgact actatccagc tagtcttgag caattgaaac 420
gttgcaagcc tatctatgaa gagttgccag gttggtcaga agatattact ggagtctgta 480
atttggaaga tcttctgag aatgcgcgta actatgttcg tcgtgtgagt gaattgggtg 540
gcgttcgtat ttctactttc tcagtag 567

<210> 26
<211> 572
<212> DNA
<213> Streptococcus species

<400> 26
atggcttgct attgaccaag ggtacatacc catttgtaac atcatctaac ccagtcgctg 60
gtggtgtaac aatcggttct ggtgttggtc caagtaaaat caacaaagtt gtcggtgtat 120
gtaaagccta cacaagccgt gttggtgacg gaccattccc aactgaactt ttagacgaag 180
ttggtgaccg catccgtgaa gtgggtcacg aatatgggac aacaactgga cgtccacgtc 240
gtgttggttg gtttgactca gttgttatgc gtcacagccg ccgcgtatca ggtatcacia 300
acttgtcact taactcaatt gacgttcttt caggtcttga tacggtcaaa atctgtgtgg 360
catacgacct tgacggtcaa cgtatcgacc actaccagc aagccttgaa caattgaaac 420
gttgtaaacc aatctacgaa gaattgccag gttggtcaga agacatcaca ggttgccgta 480
gcctagatga acttcccgaa aatgctcgtg actacgttcg ccgtgttggt gaactcgttg 540
gtgttcgcat ttcaacattc tcagttggcc cc 572

<210> 27
<211> 571
<212> DNA
<213> Streptococcus canis

```

<220>
<221> misc_feature
<222> (9)..(9)
<223> n is a, c, g, or t

<400> 27
tggcttgcnatcgaccaaggtaacttacctttgttacttcttcaaaccagttgctgg60
tggggtaacatcggttcaggtgttggtccaaagcaagatcaataaagttgtcggtgtatg120
taaagcttacacaagccgtgttggtgacggtccgttcccaacagaacttcagatgaagt180
tggagatcgtatccgtgaaa ttggtcacgaatatggtacaacaactggacgtccacgtcg240
tggttggttggtttgactcagttgttatgcgtcacagccgcgcgtatcaggtatcacaaa300
cttgtcacttaactcaatcgatgttctttcaggacttgatctgtttaaaa tctgtgtggc360
atacgaccttgacggtcaacgtatcgaccactaccagcaagtccttgaaac aattgaaacg420
ttgtaaaccaatctacgaagaattgccagg ttggtcagaa gacatcacaggttgccgtag480
cctagatgaacttcccgaatagtctcgtgctacgttcgcgcgtgttggtgaactcgttgg540
tggttcgcatttcaacattctcagttggccc c571

```

```

<210> 28
<211> 573
<212> DNA
<213> Streptococcus mutans

```

```

<220>
<221> misc_feature
<222> (11)..(11)
<223> n is a, c, g, or t

```

```

<220>
<221> misc_feature
<222> (567)..(567)
<223> n is a, c, g, or t

```

```

<400> 28
tatggcttgc nattgaccaa ggtaacctatccatttgtaa cttcatcaaa tccagttgca60
gggtggcggtta ccatcggatc tgggtgttgga ccaagtaaaa tcaataaggttggttggtg120
tgcaaagcctataccagccgtgtaggtgatggtcctttccccacagaacttttgaccaa180
acgggagagcgcattcgtgaagttgggcatgaatacggga caacaacagggcgtccgcgt240
cgagttgggttggtttgactcagttgttatgcgtcacagccgccgtgtatcaggcattacc300
aatttatctcttaactgtatgtatgtacttccaggtcttgatatcgtaaa aatctgtgta360
gcctatgatttggtatggaaaacggattgatcactaccctgccagtctcgaacaactcaaaa420

```

cgctgtaaac ctatztatga agaattgccg ggctggctctg aagatattac aggggttcgc 480
agtttagaag atcttcctga aaatgctcgt aattatgtcc gccgtgtaag tgaattagtt 540
gggtgttcgta tttctacttt ctcagtngtc ccc 573

<210> 29
<211> 572
<212> DNA
<213> Streptococcus gordonii

<400> 29
taatgctagc aattgaccaa ggtacctatc catttgtaac ctcatctaata ccagttgctg 60
gtgggtgtaac gatcggttct ggtgtgggtc ctagcaagat tgacaaagta gtgggtgttt 120
gtaaagccta tacaagtcgt gttggtgatg gtcctttccc aacagagctt ttcgatgaag 180
taggtgaccg cattcgtgag gttgggtcatg agtatggtag aacaacagga cgtccgcgtc 240
gagttgggtg gtttgactct gttgttatgc gccatagccg ccgtgtatct gggattacca 300
atctttcgtt taactctatc gatgttttga gcggtctgga tacagtcaag atctgtgtag 360
cctatgattt ggatggccaa agaatcgacc actatccagc tagtttgga cagcttaaac 420
gttgtaagcc gatttacgaa gagcttcctg gatgggtctga agatattact ggcgttcgta 480
agttagaaga tcttccagaa aatgctcgca actatgttcg gcgagtaagc gagttgggtg 540
gtgtacgtat ttccaccttc tcagttggcc cc 572

<210> 30
<211> 571
<212> DNA
<213> Bacillus species

<220>
<221> misc_feature
<222> (18)..(18)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (565)..(565)
<223> n is a, c, g, or t

<400> 30
tatggcttgc aattgacncg gtacgtaccc attcgttaca tcttctaacc cgattgcggg 60
tggtgtaaca gttggaactg gagttgggtc tgcgaaagtt actcgcgttg taggtgtatg 120
taaagcatat acaagccgtg ttggtgacgg tccattccct actgaactta atgatgaaat 180

tgggtcatcaa attcgtgaag ttgggtcgtga gtacggaaca acaactgggtc gtccgcgccg 240
 cgtaggttgg ttcgatagcg ttgttgtaag acatgcgcgt cgtgttagtg gtttaacgga 300
 tctatcatta aattctatcg acgttttaac agatattccg actcttaaaa tttgtgttgc 360
 ttacaaatac aatggcgaag ttatcgatga agttccagca aacttaaaca ttttagcaaa 420
 atgtgagcct gtatatgaag agcttccagg ttggacagaa gatattactg gtgtaaaatc 480
 attagacgag cttcctgaaa atgcacgaaa atacgtagaa cgtgtttctg agttaacagg 540
 aattcaatta tctatgttct cagtngtccc c 571

<210> 31
 <211> 574
 <212> DNA
 <213> *Bacillus pumilus*

<220>
 <221> misc_feature
 <222> (570)..(570)
 <223> n is a, c, g, or t

<400> 31
 gttatggctt gctattgatc aagggaacata tccatttgtc acgtcatcta acccagtagc 60
 tggaggagtg acgattgggt ctggcgtagg accaacaata attcaacatg tggtcggcgt 120
 gtcaaaagcg tacacaacac gtgttggaaga tggcccatc ccgacagaac tccatgatga 180
 aattggcgat caaatccgtg aggttggccg tgaatacggc acaacaactg gacgtccgcg 240
 ccgtgttggc tggtttgaca gtgtcgttgt ccgtcatgct cgacgtgtga gcgggattac 300
 agatctatct ctttaactcaa ttgatgtact gacagggatt gaaacattga aaatctgtgt 360
 cgcttataaa ttgaacggag aaatcacaga ggaattccca gcaagtctaa atgaactagc 420
 gaaatgtgag cctgtctacg aagaaatgcc aggatggaca gaggatatta caggcgtgaa 480
 gaatttaagc gaactgcctg aaaatgcccg tcattattta gagcgcattt cacaattaac 540
 aggtattcca ctttccattt tctcagttgn cccc 574

<210> 32
 <211> 560
 <212> DNA
 <213> *Enterococcus villorum*

<220>
 <221> misc_feature

<222> (557)..(557)
 <223> n is a, c, g, or t

 <400> 32
 tatcgaccag ggacatatcc atttggttact tcttccatcc agtagcaggt ggtgtaacaa 60
 ttggtagtgg cgttggtcca tctaaaatta ataaagtcgt cggagtatgt aaagcttata 120
 cttctcgtgt tggagatggc cggttcccta cagaattatt tgatgaaaca gggcaacaaa 180
 tacgtgaagt aggtcgtgaa tatggcacia caacaggctg tccacgacga gttggatggt 240
 ttgatacggg tgttatgcgc cattcaaaac gtgtatcagg tattacaaat ttatctctta 300
 attcgattga tgtattaagc ggattagaaa cagtaaaaat ttgtacggcc tatgaactag 360
 atggtgagct gatttatcat taccagcaa gtttgaaaga attgaaacgt tgtaaaccag 420
 tatatgaaga actacctgga tgggtctgaag atattacgaa atgcaagaca ctttctgaat 480
 tgccagaaaa tgcacgtaac tatgtaagac gtatttctga gcttgtaggt gtacgcatct 540
 ccacatttct cagtggcccc 560

<210> 33
 <211> 554
 <212> DNA
 <213> *Bacillus thuringiensis* serovar israelensis

<220>
 <221> misc_feature
 <222> (2)..(2)
 <223> n is a, c, g, or t

 <400> 33
 cncggtacgt acccgttcgt tacatcttct aaccgattg cgggtggtgt aacagttgga 60
 actggagttg gccctgcgaa agttactcgc gttgtaggtg tatgtaaagc atatacaagc 120
 cgtgttggtg acggtccatt ccctactgaa cttaatgatg aaattggtca tcaaattcgt 180
 gaagttggtc gtgagtacgg aacaacaact ggtcgtccgc gccgcgtagg ttggttcgat 240
 agcgttggtg taagacatgc gcgtcgtggt agtggtttta cggatctatc attaaattct 300
 atcgacgttc taacagatat tccaactctt aaaatttggt ttgcttacia atacaatggc 360
 gaagttatcg atgaagttcc agcaaactta aacatttttag cgaaatgtga gcctgtatat 420
 gaagagcttc caggttggtg agaagatatt actggtgtaa aatcattaga cgagcttcct 480
 gaaaatgcaa gaaaatacgt agaacgtggt tctgagttta caggaattca attatctatg 540
 ttctcagtggt cccc 554

<210> 34
 <211> 552
 <212> DNA
 <213> *Bacillus thuringiensis* serovar *kurstaki*

<220>
 <221> misc_feature
 <222> (547)..(547)
 <223> n is a, c, g, or t

<400> 34
 ggtcgtatcc attcgttaca tcttctaacc cagttgctgg tgggtgtaaca atcgggttctg 60
 gagttggtcc ttctaaaatc aatcgtgtag taggcgtatg taaagcatat acaagccgtg 120
 ttggtgacgg tccattccct actgaactta atgatgaaat tggccatcaa attcgtgaag 180
 ttggtcgtga atatggtaca acaacaggtc gtccacgtcg cgtagggttg tttgacagcg 240
 ttgttgtaag acatgcacgc cgtgtgagtg gtttaacaga tttatcttta aactctatcg 300
 acgtattaac aggtattcca actgtgaaaa tctgtattgc atataagtat aatggagaag 360
 ttctggatga agttccagca aacttaaaca ttttagcaaa atgtgagcct gtatatgaag 420
 agcttccagg ttggacagaa gatattactg gtgtaaaatc attagaggag cttcctgaaa 480
 atgcaagaca ttatgtagag cgtgtgtctc aattaacagg tatccaatta tctatgttct 540
 cagttgnccc cc 552

<210> 35
 <211> 555
 <212> DNA
 <213> *Bacillus myco?es*

<220>
 <221> misc_feature
 <222> (4)..(4)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (548)..(548)
 <223> n is a, c, g, or t

<400> 35
 ggtncgtacc cattcgttac atcttctaacc cagattgctg gtggtgtaac agttggaact 60
 ggagttggtc ctgcgaaagt tactcgcgtt gtaggtgtat gtaaagcata tacaagccgt 120
 gtaggtgatg gtccgttccc tactgagctt catgatgaaa ttggtcatca aattcgtgaa 180

gttggtcgtg aatacggaaac aacaactggt cgtccacgcc gcgtaggttg gttcgatagc 240
 gttgttgtaa gacatgcacg tcgtgttagt gggttaacag atctatcatt aaattctatc 300
 gacgttctaa caggtattcc aactcttaaa atttgtgttg cttacaaata caatggcgaa 360
 gttatcgatg aagttccagc aaacttaaac attttagcga aatgtgagcc tgtatatgaa 420
 gagcttccag gttggacaga agatattact ggtgtaagag cattagacga gcttcctgaa 480
 aatgcacgaa aatacgtaga acgtgtttct gagttaacag gaattcaatt atctatgttc 540
 tcagtgncc cccgg 555

<210> 36
 <211> 546
 <212> DNA
 <213> Bacillus myco?es

<220>
 <221> misc_feature
 <222> (5)..(5)
 <223> n is a, c, g, or t

<400> 36
 cggtnctgac ccgttcgtta catcttctaa cccgattgct ggtggtgtaa cagttggaac 60
 tggagttggt cctgcgaaag ttactcgcgt tgtaggtgtg tgtaaagcat atacaagccg 120
 tgtaggtgat ggtccattcc ctactgagct tcatgatgaa attggtcatc aaattcgtga 180
 agttggtcgt gagtatggaa cgacaactgg tcgtccacgc cgcgtaggtt ggttcgatag 240
 cgttggtgta agacatgcac gtcgtgttag tgggttaaca gatttatcat taaattctat 300
 cgacgttcta acaggtattc caactcttaa aatttgtgtt gcttaciaat acaatggcga 360
 agttatcgat gaagttccag caaacttaaa catcttagcg aaatgtgagc ctgtatatga 420
 agagcttcca gggtgggaag aagatattac tgggtgtaaaa tcattagacg aacttcctga 480
 aaatgcaaga aaatacgtag agcgtgtttc tgaattaaca ggaatccaat tatctatggt 540
 ctcagt 546

<210> 37
 <211> 581
 <212> DNA
 <213> Bacillus weihenstephanensis

<220>
 <221> misc_feature
 <222> (8)..(8)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (14)..(14)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (473)..(473)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (564)..(564)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (576)..(577)

<223> n is a, c, g, or t

<400> 37

tttttttngg aagngcgcaa ggtgttatgc ttgatatcga ccacggtagc taccogttcg 60

ttacatcttc taaccaatt gctggtggtg taacagttgg aactggagtt ggtcctgcga 120

aagttactcg cgttgtaggt gtatgtaaag catatacaag ccgtgttggt gatgggccat 180

tcctactga acttaatgat gaaatcggtc accaaattcg tgaagttggt cgtgaatacg 240

gaacaacaac gggtcgtcca cgccgtgtag gttggttcga tagcgttggt gtaagacatg 300

cacgtcgtgt tagtggttta acagatttat cattaaactc tatcgatgta ttaacaggta 360

ttccaactgt taaaatttgt gttgcttaca aatgcaatgg cgaagttatc gatgaagttc 420

cagctaactt aaacatttta gcgaaatgtg agcctgtata tgaagagctt ccngggttga 480

cagaagatgt tactgctgtg aaatcattgg atgagcttcc tgaaaatgca agaaaatacg 540

tagagcgtgt tttctgaatt aacnggaagc caattnncaa g 581

<210> 38

<211> 572

<212> DNA

<213> Staphylococcus haemolyticus

<400> 38

caaggtgtca tgtagatat cgaccatggt acatatacctt tcgtaacttc aagtaaccct 60

gttgccaggt atgtaacagt tggtacaggt gtaggccccaa ctttcgtatc taaagtgatt 120

ggtgtatgta aagcatatac atctcgtgta ggcgatgggtc cattccctac agaattatct 180

gatgaaaatg gacatcatat tagagaagtt ggctcgtgaat acggtacaac aacaggacgt 240

ccacgctcgtg taggttggtt tgactcagtt gtattacgtc actctcgtcg tgttagtggt 300
 attacagact tatctattaa ctctatcgac gtacttacag gtcttgatac agtgaagatt 360
 tgtactgctt acgaattaga tggagaagaa attacagaat atcctgctaa cttagatcaa 420
 ttacgctggt gtaaaccaat ctttgaagag ttaccaggat ggaagaaga tatcactggt 480
 tgccgtacat tagaagaatt accagataac gcacgtaaat acttagaacg catttctgaa 540
 ttatgtaatg tacgtatttc aatcttctca gt 572

<210> 39
 <211> 578
 <212> DNA
 <213> *Staphylococcus saprophyticus*

<400> 39
 gcaaggtgtg atgttagata tcgaccatgg tacatatcca ttcgttcatc aagtaaccca 60
 gttgcaggta atgtgactgt cggtagcggt gtaggtccaa cattcgtctc taaagttatc 120
 ggtgtgtgta aagcctatac atcacgtgtc ggcgatggtc cattcccaac agaactatct 180
 gacgaagatg ggcaccacat ccgtgaagta ggtcgtgaat acggtacaac aacaggacgt 240
 ccacgctcgtg taggttggtt cgactcagtt gtattacgtc attctcgtcg tgcaagtgg 300
 attacagatt tatctattaa ctcaattgat gtattaacag gccttaaaga agttaaaatc 360
 tgtactgctt atgagttaga cggtaaagaa attacggaat acccagctaa cttgaaagac 420
 ttacaacggt gtaagccaat ttttgaaaca ttaccagggt ggacagaaga tgtgacagg 480
 tgctggtcat tagaagaatt acctaataat gcgcgtagat acttagaacg tatttctgaa 540
 ttatgtgacg tgaagatttc aatcttctca gttggccc 578

<210> 40
 <211> 583
 <212> DNA
 <213> *Bacillus subtilis*

<220>
 <221> misc_feature
 <222> (542)..(542)
 <223> n is a, c, g, or t

<400> 40
 ctcaaggggt tatgcttgat attgaccaag ggacataccc gtttgtcact tcatccaacc 60
 cggtcgccgg aggggtgacg atcgggttcag gcgtagggcc gacaaaaatc cagcacgtcg 120

tcggtgtatc taaagcgtac acaacccgtg tcggtgacgg tcctttcccg actgagctga	180
aagatgaaac cggggatcaa atccgtgaag tcggacgca atacggcaca acgacaggcc	240
gtccgcgccg tgtcggtggtg tttgacagcg ttgttgccg ccatgcccg cgcgtcagcg	300
gaatcacaga tctttctctg aactcaatcg atgtgctgac tggcattgaa acattgaaaa	360
tctgtgtcgc ttaccgctac aaaggtgaag tgattgaaga attcccgga agtctgaaag	420
ctctgcgaga gtgtgaaccg gtatatgaag aaatgcctgg ctggacggaa gatatacag	480
gcgcaaaaac attaagcgat cttcctgaaa atgcgcgcca ttatctggaa cgcgtgtctc	540
anctgacagg tattccgctt tctatcttct cagtaggtcc aga	583

<210> 41
 <211> 598
 <212> DNA
 <213> *Listeria monocytogenes*

<400> 41	
tttgaagggt gcgcaagggt ttatgcttga tattgatcaa ggaacatata catttgtaac	60
ttcaagtaac ccgattgctg gtggcgtaac tatcggtagt ggtgttggtc cttcaaaaat	120
caatcatgtt gttggtgtgg cgaaagctta tacaacacgt gttggtgatg gtcctttccc	180
aacagaatta tttgattcta ttggtgacac tattcgtgaa gtcggtcatg aatatggtac	240
aacgactggt cgtccgcgtc gtgtagggtg gtttgatagc gtagtgggtc gtcatacgcg	300
tcgtgttagt ggattaacag atttatcgtt aacactactt gatgttttga caggaattga	360
gacacttaaa atctgtgtag cttacaaatt agacggaaaa acaattacag agttcccagc	420
aagtttgaaa gatttagctc gttgcgaacc tgtttatgaa gaacttccag gctggacgga	480
agatattact ggagttacat cactagatga tcttcagtg aactgccgcc attacatgga	540
gcgtatcgcc caacttacgg gaggcaagt ttctatgttc tcagtaggtc ccagacca	598

<210> 42
 <211> 573
 <212> DNA
 <213> *Lactococcus lactis*

<220>
 <221> misc_feature
 <222> (2)..(2)
 <223> n is a, c, g, or t

 <220>
 <221> misc_feature

<222> (18)..(18)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (567)..(567)
 <223> n is a, c, g, or t

<400> 42
 tnatgcttga tattgacnag gaacataccc atttgtaact tctcaaaccc agtagctggt 60
 ggggtaacga ttggctctgg tgtgggtcca tcaaaaattt caaaagttgt tgggtgtttgt 120
 aaagcctata cttcacgtgt gggatgatgt ccattcccaa cagaactttt tgatgaagtt 180
 ggacatcaaa ttcgtgaagt aggacatgaa tatggaacaa caacaggacg tccacgtcgt 240
 gttggttggg ttgactcagt cgtaatgcgt catgcaaaac gtgtttcttg cttgacaaat 300
 cttagcttga attcaattga cgttctctca ggacttgaaa cagtaaaaat ttgtgttgct 360
 tacgaacgta gtaatggtga acaaattact cattatccag catcacttaa ggaattagca 420
 gattgcaaac caatctatga agaattgcc ggatggtctg aagatattac ttcattgccga 480
 actttagaag agttaccaga agctgctcgt aactatgttc gtcgggttgg tgaactagtt 540
 ggcgtacgta tctcgacttt ctcaagtngtc ccc 573

<210> 43
 <211> 599
 <212> DNA
 <213> Enterococcus hirae

<220>
 <221> misc_feature
 <222> (551)..(551)
 <223> n is a, c, g, or t

<400> 43
 ctttttgaag gggcgcaagg ggtaatgcta gatattgacc aaggtaacct tccatttgta 60
 acctcatcta atccagttgc tgggtggtgta acgatcggtt ctggtgtggg tcctagcaag 120
 attgacaaag tagtgggtgt ttgtaaagcc tatacaagtc gtgttggtga tggtcctttc 180
 ccaacagagc ttttcgatga agtaggtgac cgcattcgtg aggttggtca tgagtatggt 240
 acaacaacag gacgtccgag tcgagttggt tggtttgact ctgttggttat gcgccatagc 300
 cgccgtgtat ctgggattac caatctttcg cttaactcta tcgatgtggt gagcgggtctg 360
 gatacagtca agatctgtgt agcctatgat ttggatggcc aaagaatcga ccactatcca 420
 gctagtttgg aacagcttaa acgttgtaag ccgatttacg aagagcttcc tggatggtct 480

gaagatatta ctggcggttcg taagttagaa gatcttccag aaaatgctcg caactatggt 540
 cggcgagtaa ncgagttggt tgggtgtacgt atttccacct tctcagtagg tccagacca 599

<210> 44
 <211> 505
 <212> DNA
 <213> Enterococcus avium

<400> 44
 cttttcgaag gtgcgcaagg tgtaatgctg gatattgac aagggactta tccatttggt 60
 acctcttcta atccggttgc cggcggtgac acgatcggtg gcggtgttgg accatcgaag 120
 attgataaag tcgtaggggt atgtaaagct tatacatcac gcgttggtga tggacctttt 180
 ccaacggaat tatttgacga agtcggcgat cagatccgcg aagttggtcg tgaatatgga 240
 acaacaactg gccgtccacg tcgagttggc tggtttgact ctgtggttat gcggcactca 300
 aaacgcgctt ctgggattac caatctatct ttgaactcaa tcgatgtgtt gagcggcttg 360
 gaaacggtca agatttgtac cgcttatgag ttagacggag aattaatcta tcattatcca 420
 gcaagcttaa aggaattgaa tcgctgcaaa ccagtttatg aagagctacc tggctggagt 480
 aaggatatta ctggctgtcg tgatt 505

<210> 45
 <211> 598
 <212> DNA
 <213> Streptococcus bovis

<400> 45
 tttttgaagg ggctcaagg gtcattgctg atattgacca aggtacatac ccatttggtta 60
 catcttcaaa cccagttgct ggtggtgtaa ctatcggttc aggtgttggt ccaagcaaga 120
 tcaacaaagt tgttggtgta tgtaaagcct acacaagtcg tgttggtgat ggtccattcc 180
 caacagaact tctagacgaa gttggagatc gtatccgtga aatcggtcac gaatatggta 240
 caacaacagg acgtccacgt cgtgttggtg ggtttgactc agttgtaatg cgtcacagcc 300
 gtcgcgtatc aggtatcaca aacttggtcac ttaactcaat cgacgttctt tcaggacttg 360
 atactgttaa ggtctgtgtg gcttacgacc ttgatggcca acgtatcgac cactatccag 420
 caagtcttga acaattgaaa cgttgtaaac caatctacga agaattgcca ggttggtcag 480
 aagacatcac aggtgcccgt agcctagatg agcttcaga aaatgctcgt aactatgttc 540
 gtcgtgttgg tgaacttggt ggtgttcgca tttcaacatt ctcagttggt ccaggcca 598

<210> 46
 <211> 598
 <212> DNA
 <213> Streptococcus thermophilus

<220>
 <221> misc_feature
 <222> (508)..(508)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (569)..(569)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (593)..(594)
 <223> n is a, c, g, or t

<400> 46
 ctatttgaag gtgcgcaagg agttatgctt gatattgacc aaggaacata cccatttgta 60
 acgtcatcaa acccagttgc tgggtggtgtt acaattgggt ctggtggttg gccatctaaa 120
 attaataagg ttgtgggtgt atgtaaggcc tatacaagtc gtgtcggcga tggtcctttc 180
 ccaactgagt tgtttgatga agtgggtgaa cgtatccgtg aagttggcca tgaatatgga 240
 acaacaactg gacgtccacg tcgtgtggga tggtttgact cagtggtaat gcgtcatagc 300
 cgtcgtgtat caggtattac aaaccttagc ttgaactgta tcgacgttct ttctggtctt 360
 gatactgtga aaatttgtgt agcctacgat cttgatgggt agcgcattga ttactatccg 420
 gctagccttg agcaattgaa acgttgtaaa ccaatttatg aagaattgcc aggttgggaa 480
 gaggatatta caggttgccg tagtttanat gagcttcctg aaaatgcccg taattatggt 540
 cgtcgtattg gtgagttggt cgttatacnt atctctacct tctcagtagg ccnnacca 598

<210> 47
 <211> 591
 <212> DNA
 <213> Streptococcus suis

<400> 47
 cgaaggacgc aaggagttat gttggatatg accaaggtag ctatccattc gttacttctt 60
 caaaccaggt tgctggtggt gtgacgatcg gtagcgggtg cggcccaagc aagattgaca 120
 aggttggttg tgtatgtaag gcctacacta gccgtggttg tgacggacca tttccgactg 180
 aattgcacga tgaaatcgga gaccgtatcc gcgaaatcgg taaagagtag ggtacgacaa 240

ctggccgtcc acgcggtgtc ggttggtttg actcagtggt gatgcgccat agccgccgtg 300
 tgtcaggtat taccaacttg tccctcaact cgattgacgt cttgtcaggt cttgggacct 360
 tgaaaatctg cgtggcttat gacttggtat gtgagcgtat tgaccactac ccagcaagtt 420
 tggagcaact caaacgttgc aaaccaatct acgaagaaat gccaggttgg tctgaagaca 480
 tcacaggtgt acgtagcctg gatgaattgc cagaagcggc tcgcaactat gttcgtcgta 540
 tcagcgaatt ggtaggcgtt cgtatctcaa ccttctcagt aggtccagac c 591

<210> 48
 <211> 599
 <212> DNA
 <213> Bacillus pseudomyces

<220>
 <221> misc_feature
 <222> (594)..(594)
 <223> n is a, c, g, or t

<400> 48
 ctatttgaag gggcgcaagg cgtaatgctt gatattgac aaggtacgta tccattcggt 60
 acatcttcta acccagttgc tgggtggtga acaatcggtt ctggagttgg tccttctaaa 120
 atcaatcgtg tagtaggcgt atgtaaagca tatacaagcc gtgttggtga cgggccattc 180
 cctactgaac ttaatgatga aattggccat caaatcgtg aagttggtcg tgaatatggt 240
 acaacaacag gtcgtccacg tcgcgtaggt tggtttgaca gcgttggtgt aagacatgca 300
 cgccgtgtga gtggtttaac agatttatct ttaaactcta tcgacgtatt aacaggtatt 360
 ccaactgtga aaatctgtat tgcatataag tataatggag aagttctgga tgaagttcca 420
 gcaaacttaa acattttagc aaaatgtgag cctgtatatg aagagcttcc aggttgga 480
 gaagatatta ctggtgtaaa atcattagag gagcttctg aaaatgcaag acattatgta 540
 gagcgtgtgt ctcaattaac aggtatccaa ttatctatgt tctcagtagg gccngacca 599

<210> 49
 <211> 604
 <212> DNA
 <213> Staphylococcus capitis capitis

<220>
 <221> misc_feature
 <222> (528)..(528)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (530)..(530)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (570)..(570)
 <223> n is a, c, g, or t

<400> 49
 ctcttcgagg agctcaaggt gtcattgtag acatcgacca tggtagttac ccattcgtta 60
 cgtcaagtaa ccaggttgct ggtaattgtca cagtaggtac aggtgtaggt cctacatcag 120
 tttctaaagt catcgggtgta tgtaaattcat atacgtcacg ttaggtgat ggtccattcc 180
 ccacagaatt attcgatgaa gatgggtcatc acattagaga agtaggtcgt gaatatggta 240
 caacaacagg acgtccacgc cgtgtaggtt ggtttgactc agtggtagta cgtcattcac 300
 gtcgcgtaag tggtagtaca gatctttcaa tcaactctat cgacgtttta acaggtttag 360
 atacagttaa aatttgtaga gcattatgagt tagatggcga agaaatcact gaatacccag 420
 ctaacttaga tcaattaaga cgctgtaaac caatcttcga agaacttcca ggttggacag 480
 aagatatcac agggctgccc cagtttagaa gaactccctg aaaatgcncn ccaaatacct 540
 agagcgtatt tcaaaattat gtggcgtaac catttcaatc cttctcagta ggggccctga 600
 cccc 604

<210> 50
 <211> 597
 <212> DNA
 <213> Staphylococcus sciuri

<220>
 <221> misc_feature
 <222> (563)..(563)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (571)..(571)
 <223> n is a, c, g, or t

<400> 50
 ctttttgaag gtgcgcaagg tgtaggtgta gatatcgacc acggtacata tccattcgtt 60
 acttcaagta atccaattgc aggtaacgtt acagtaggtg gcggtgttgg tccaacatac 120
 gtatctaaag taattgggtg atgtaaagct tatacatctc gtgtaggaga cgggtccattc 180

ccaacagaat tatttgatga agatgggtcac catatccgtg aagtaggtcg tgaatacgggt	240
aoaacaactg gaagaccacg tcgtgtaggt tggtttgact cagtagttct acgtcactca	300
cgccgtgtaa gtggtattac agatttatca atcaactcaa ttgacgtatt aacaggatta	360
aaaacagtta aaatctgtac agcatacgaa attgatgggtg ttgaaatcac tgaatatcca	420
gcaaacttaa acgaattaga acgttgtaaa ccaatctttg aagaactacc aggttgggaa	480
gaagacatta caggatgccg ttcactagaa gaattaccag ataacgcacg tcgtttttta	540
aaacgcatct ctgaattatg tancgttaaa nttctatctt ctcagtaggt ccaggtc	597

<210> 51
 <211> 605
 <212> DNA
 <213> Staphylococcus warneri

<400> 51	
ctttttgaag gagcgcaagg tgtgatgtta gacatcgacc acggtacata tccattcgtc	60
acttcaagta acccagtagc aggtaacgtt actgtaggta ctggtgtagg tccaacatac	120
gtatcaaaaag tcattggtgt atgtaaagct tatacatcac gtgttggtga tgggtccattc	180
cctacagaat tatttgatga agatgggtcat cacattagag aagttgggtcg tgaatacgggt	240
acaacaactg gtcgtccacg tcgtgtaggt tggttcgact cagtagtatt acgtcattca	300
cgccgtgtaa gtggtattac agacttatca atcaactcaa ttgatgtggt aactggctta	360
gatacagtta aaatctgtac agcatatgaa ttagatggta aagaaattac tgaatatcca	420
gctaacctag atcaattaca acgttgtaaa ccaatcttcg aagaattacc tggttggaca	480
gaagatatta cagggtgccg tacttttagaa gagcttcctg aaaatgcacg caaatattta	540
gaacgtatatt ctgaattatg tggcgtagct atttcaatct tctcagttgg tcctggccag	600
ggcga	605

<210> 52
 <211> 599
 <212> DNA
 <213> Staphylococcus lugdunensis

<400> 52	
ttctttgaag gagctcaagg tggttatgtta gatattgatc atggtacata tcctttcgtc	60
acatcaagca atcctgtagc cggcaatgtc actgttggtta cagggtgtagg tccaaccttc	120
gtttctaaag taattggtgt gtgtaaagca tacacatctc gcgtaggcga tggtcctttc	180

ccaactgaac tatttgatga agatgggcac catattagag aggttggtcg tgaatatggt	240
acgacgacag gacgtccacg tcgctgggt tggtttgatt cagtcgtgct acgtcactca	300
cgctcgtgta gtggtattac agacttatct attaactcta ttgatgtact aacaggttta	360
gatacggtaa aaatttgtag agcttatgag ttagatggag aagaaattac ggagtatcca	420
gctaaccttg atcaattaaa acgttgtaaa ccaatctttg aagaattacc tggttggaca	480
gaagatatta caggctgtcg ttcattagaa gcattgcctg ataatgcacg tcgctattta	540
gaacgtattt cagaattatg cggcgttcat atttcaattt tctcagtagg gccagacca	599

<210> 53
 <211> 599
 <212> DNA
 <213> *Staphylococcus gallinarum*

<400> 53	
ctttttgaag gtgcgcaagg cgttatgta gatatcgacc atggtacata cccatttggt	60
acttctagta atccagttgc aggtaacgta actgtagggtg gcggtggttg accaacattc	120
gtatcaaaaag taattggcgt atgtaaagcc tatacatcac gtgttggtga cggcccattc	180
ccaactgaat tatttgatga agatggacat catatccgtg aagttggccg cgaatatggt	240
acaacaacag gacgtccacg tcgtgtgggt tggtttgact ctgttgatt acgtcattca	300
cgcctgcaa gtggtatcac agatttatct atcaactcta ttgacgtatt aacaggtctt	360
gaaaatgta agatttgtag tgcatacgaa ttagatggag aagaaatcac tgaataccca	420
gcaaacttaa aggacttaca acgttgtaaa ccaatctttg aaacattacc aggttgga	480
gaagatgtca caagctgtcg ttcactagat gaattaccag ataatgcacg cagatattta	540
gagcgcattt ctgaaccatg taacgtgaag atttcaatct tctcagtagg gccagacca	599

<210> 54
 <211> 600
 <212> DNA
 <213> *Staphylococcus schleiferi schleiferi*

<400> 54	
gacctggacc aactgagaag atagaaatat ggacgttaca taattctgaa atacgtcta	60
agtaacggcg tgcattttgt ggtagttcgt ctaaactacg tacacctgta atatcttcag	120
tccaacctgg taatgtttca aagataggtt tacaacgttt taagtcgttt aagtttgctg	180
ggatttccgt aatctctttt ccatctaatt cataagctgt acagatttta acctcttcta	240
agccagttaa gacgtcgata gagttgattg ataaatctgt aatcccactt acacgacgag	300

agtgacgtaa tacaacggag tcaaaccaac ctacacggcg tggacgacct gttgttgtgc	360
catattcacg tccgatttca cgaatatggg gcccttgttc atcaaataat tctgttggga	420
atggcccatc acctacacgt gaagtgtatg ctttacatac gccaaactact tttgatacat	480
ttgttggccc tacaccagca ccaactgtca cgttaccgcg tacagggtta cttgatgtta	540
caaaaggata tgttccgtga tcgatgtctg acatcacccc cttgagcccc ttcaaagaga	600

<210> 55
 <211> 599
 <212> DNA
 <213> Staphylococcus capitis ureolyticus

<400> 55	
gaccaggccc aactgagaag attgaaatgt gtacgccaca taattctgaa atacgctcta	60
ggatatttgcg tgcattttca gggagttctt ctagactgcg acaacctgtg atatcttctg	120
tccaacctgg aagttcttcg aagattgggt tacagcgtct taattgatct aagttagctg	180
ggatattcagt gatttcttcg ccatctaact catatgctgt acaaatttta actgtatcta	240
aacctgttaa aacgtcgata gagttgattg aaagatctgt gataccactt acgcgacgtg	300
aatgacgtaa tactactgag tcgaaccaac ctacacggcg tggacgtcct gttgttgtac	360
catattcacg acctacttct ctaatgtgat gaccatcttc atcgaataat tctgtaggga	420
atggaccatc acctacacgt gacgtatatg atttacatac accgatgact ttagaaactg	480
atgtaggacc tacacctgta cctactgtga cattaccagc aactgggtta cttgacgtaa	540
cgaatggata tgtaccgtgg tcgatgtcta acatgacacc ttgcgcacct tcaaataaa	599

<210> 56
 <211> 599
 <212> DNA
 <213> Staphylococcus cohnii urealyticum

<400> 56	
ctcgttgaag gtgcacaagg cgttatgtta gatatcgacc acggtacata cccattcggt	60
acgtcaagta acccagttgc aggtaatgtc actgtcgggt gtggtgttgg tccaacatac	120
gtatctaaag tcattggcgt atgtaaagct tatacatcac gtgtcgggtga tggcccatc	180
ccaacagaac tatttgatga tgatggacac cacatccgtg aaattggccg tgagtacggt	240
acaactactg gacgtccacg tcgtgtaggt tggttcgatt cagttgtatt acgtcactct	300
cgtcgtgcga gtggtattac tgatttatca atcaactcta tcgatgtctt aacaggcctt	360

aaagaagtga agatttgtac ggcgtatgaa ttggacggta aagaaattac tgaatatcca 420
gcgaatttaa aagacttaca acgttgtaag ccaatctttg aaacattacc tggttggaca 480
gaagatgtta caggttgctg ctcatatgat gagctgccag acaatgcacg tagatattta 540
gaacgtatct ctgaattatg tgacgttcaa atttcaatct tctcagtagg gcctgacca 599

<210> 57
<211> 599
<212> DNA
<213> Staphylococcus xylosus

<400> 57
ctttttgaag gtgctcaagg tgtaatgcta gatatcgatc atggtactta cccattcggt 60
aqttaacgta acccagttgc cggtaacggt actgttggtg gcggtgtagg tccaacattc 120
gtatctaaag tcattggtgt atgtaaggca tatacatcac gtgtaggcga tggtcctttc 180
ccaactgaac tatttgatga tgacggggcac catatccgtg aagtaggtcg tgaatacggg 240
acaactacag gtgcgtccacg ccgtgtaggt tggttcgatt cagttgtatt acgtcactct 300
cgccgtgcga gtggtattac agacctatca atcaactcta ttgatgtggt aacaggtcta 360
aaagaagtta aaatctgtac tgcctatgag ttagacggta aagaaatcac tgaatatcca 420
gcaaacttga aagacttaca acgttgtaag ccaatctttg aaacattgcc tggttggaca 480
gaagatgtta ctggttgctc atcatatgat gaattacctg ataatgcacg tagatactta 540
gaacgtatat ctgaactaag tgatgttaag atttctatct tctcagtagg gccagatca 599

<210> 58
<211> 599
<212> DNA
<213> Staphylococcus simulans

<400> 58
ctatttgaag gagcgcaagg gggtatgtta gacatcgacc atggtacata cccattcggt 60
acatcaagta acccgattgc tggtaacggt actgtcggcg gcggtatcgg accaacaatca 120
gtatctaaag taatcgggtgt atgtaaagcg tatacgtcac gtgtaggtga tggtcattc 180
cctactgaat tattcgatga agatgggtcat catatccgtg aagtaggtcg tgaatatggt 240
acaactacag gacgcccacg tcgtgtcggc tggttcgact cagtggtatt acgtcattca 300
cgctgtgtta gtggtattac tgacttatct atcaactcaa tcgacgtttt aactgggtta 360
gatacagttta aaatctgtgt tgcgtatgag ttagatgggtg aagaaatcac tgaataccca 420
gcaaacttaa acgcgttgaa ccgttgtaaa ccaatttacg aagaattacc aggttggtct 480

gaagatatta caggcgtaca atcattagaa gaattaccag ataacgcacg tcgttactta 540
gaacgtatatt ctgagttatg taacgtaggt atctcaatct tctcagttgg tccagggtca 599

<210> 59
<211> 598
<212> DNA
<213> *Staphylococcus cohnii cohnii*

<400> 59
tatttgaagg tgcacaagga gtaatgcttg atatcgatca tgggtacttat ccgttcgtca 60
cttcaagtaa cccgattgcc ggtaacgtaa cagttggtac tgggtgtaggt ccaacgtttg 120
tagataaagt tgttggtgta tgtaaagctt acacatcacg tgtaggggat ggaccattcc 180
caactgaatt atttgatgaa gatgggtcatc atattcgtga agtggggtcgt gaatatggaa 240
cgactacagg acgtccacgt cgtgtaggtt ggtttgactc tgttggtatta cgccattctc 300
gccgtgcaag tgggtattacg gacttggtcaa ttaactctat tgacgtatta actgggttag 360
aaactgttaa gatttggtaca gcatatgaat tggatggaaa agagattaca gaatatccag 420
cgaatttaaa tgaactaaat cgttgtaaac cgattttcga agaattacca ggatggactg 480
aagatgtgac ttcatgtaag tcattagacg agctacctga taacgcacgc cgttacttag 540
agcgtatttc ggagttatgt aatgttaaga tttctatctt ctcagtaggt ccagacca 598

<210> 60
<211> 599
<212> DNA
<213> *Staphylococcus auricularis*

<220>
<221> misc_feature
<222> (361)..(361)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (484)..(484)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (541)..(541)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (553)..(553)

<223> n is a, c, g, or t

<400> 60
ctatttgaag gagctcaagg tgtgatgtta gatatcgacc atggtacgta cccatttggt 60
acatctagta accctgttgc tggtaacgtg acagtgggtg caggtgtagg tccaacgttt 120
gtctctaaag tgattggtgt atgtaaagcc tatacatcac gtgtcgggtga tgggccattc 180
ccaactgaat tatttgatga tgatgggtcac cacatccgtg aagtcggaca tgaatacggc 240
acaacaacag gacgccaag acgtgtcggc tgggttcgact ctgtgggtatt acgtcactct 300
cgccgtgtga gcggtattac agacctttct attaactcta ttgatgtgtt aactggttta 360
natacagtta aaatttgtac cgcatacgaa ttagatgggg aagaaattac agagtaccca 420
gcaaacttaa acgatctaaa acgctgcaaa ccaatctttg aagaacttcc aggttggaaac 480
gaanatatta caggttgccg cagcttagaa gaattacctg acaatgcacg tcactactta 540
naacgcattg canaactttg tgacgtaaac atttcaatct tctcagttgg gccagacca 599

<210> 61
<211> 599
<212> DNA
<213> *Staphylococcus caseolyticus*

<400> 61
cttttcgaag gggcgcaagg agtaatgctt gatatcgatc atggtactta tccgttcgtc 60
acttcaagta acccgattgc cggtaacgta acagttggta ctgggtgtagg tccaacgttt 120
gtagataaag ttgttggtgt atgtaaagct tacacatcac gtgtaggaga tggaccattc 180
ccaactgaat tatttgatga agatgggtcat catattcgtg aagtgggtcg tgaatatgga 240
acgactacag gacgtccacg tcgtgtaggt tggtttgact ctgttggtatt acgccattct 300
cgccgtgcaa gtgggtattac ggacttggtca attaactcta ttgacgtatt aactggttta 360
gaaactgtta agatttgtac agcatatgaa ttggatggaa aagagattac agaatatcta 420
gcgaatttaa atgaactaaa tcgttgtaaa ccgattttcg aagaattacc aggatggact 480
gaagatgtga cttcatgtaa gtcattagac gagctacctg ataacgcacg ccgttactta 540
gagcgtattt cggagttatg taatgttaag atttctatct tctcagttgg tccagacca 599

<210> 62
<211> 599
<212> DNA
<213> *Listeria innocua*

<400> 62

cttttcgaag gagcacaagg gggttatgctt gatattgatac aaggaacata tccatttgta 60
 acttcaagta atccgattgc tgggtggcgta acaattggta gcggtggttg cccatcgaaa 120
 atcaatcatg ttgttggtgt tgcaaaagca tatacaactc gtgttgagaga tggtcctttc 180
 ccaactgaat tatttgattc tattggtgac actatccgtg aagttggcca tgaatatggt 240
 acaactactg gtcgtccgcg tcgtgtaggt tggtttgata gcgtggttgt tcgtcatgct 300
 cgtcgtgtga gcggactaac aggtttatcc ttaacgctac tggacgtttt gacagggatt 360
 gaaacactta aaatctgtgt agcgtacaag ttagacggaa aaacaattac agaattcccg 420
 gcaagcttga aagacttagc tcgttggtgaa cctgtttatg aagaactgcc tggttggaca 480
 gaagatatta ctgaagtga atcattagat gacctaccag taagttgtcg tcattacatg 540
 gaacgcattg ctcaacttac aggtgtgcaa gtttctatgt tctcagtagg gcctgatca 599

<210> 63
 <211> 469
 <212> DNA
 <213> Escherichia coli

<400> 63
 ctatttgaag gggcgcaagg aaaaaggatt gtcgatgcat aacgcctccg gattgactct 60
 ggcttaaagc gtagtcagtg gaggagataa caaattcatt ttacaaaaa cttaaacaatg 120
 aagggggaga cgctttctcc cccttagttt tcaggccttc tcaagcatgg cgtgcttctg 180
 caggctctgg atactcagcg ttaagctcat cagacaattt tcaagcttat cggcgttgac 240
 ggtaataaca gtcgggcaat catggtgccc actcatcaaa catactgcgg ctgtcgctaa 300
 tgcttcttca gcatgatgaa gagcactcca ctcttcctga tccagatgaa gattcaaccg 360
 cagcgattta tcgtgcagtt cgcgattcag tttaaaaaag ttatctcgta gatgattgct 420
 ttcgctgacg gacatgtatc cttttgcctt tctcagttgg gccagacca 469

<210> 64
 <211> 460
 <212> DNA
 <213> Bacillus anthracis

<220>
 <221> misc_feature
 <222> (2)..(2)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature

<222> (5)..(5)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (15)..(15)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (18)..(18)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (26)..(26)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (440)..(440)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (449)..(449)
 <223> n is a, c, g, or t

<400> 64
 anttnggggca tgggnccontc tttatnagca gcatcgataa ccattttttac aagacgtaaa 60
 atagatagggt tatatgggttg gtataagtaa gatacttggt cgttcatacg gtctgcagcc 120
 attgtgtatt gaattaagtc atttgttccg atagagaaga aatcaacttc ttttgcgaa 180
 tgatctgcta atactgctga agctgggatt tcaaccatca taccaacttc aatagaatca 240
 gaaacagttg taccacttc tacaagtttc gctttttctt ctaataagat cgcttttgct 300
 tgacggaact catcaagagt tgcaatcatt gggaacataa tttttaagtt accgtatacg 360
 ctagcacgaa gtaatgcacg aagttgtgta cggaacacat cttgctcatc aagacataag 420
 cgaattgcac ggtagcccan gaacggatnt ttttctttaa 460

<210> 65
 <211> 444
 <212> DNA
 <213> Bacillus anthracis butare

<220>
 <221> misc_feature
 <222> (1)..(1)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (14)..(14)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (19)..(19)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (22)..(22)
 <223> n is a, c, g, or t

<400> 65
 ncttggcagg gccntctttna tncgcagcat cgataaccat ttttaacaaga cgtaaaatag 60
 atagggttata tgggttggtat aagtaagata cttgttcggtt catacgggtct gcagccattg 120
 tgtattgaat taagtcattt gttccgatag agaagaaatc aacttctttt gcgaattgat 180
 ctgctaatac tgctgaagct gggatttcaa ccatcatacc aacttcaata gaatcagaaa 240
 cagttgtacc cacttctaca agtttcgctt tttcttctaa taagatcgct tttgcttgac 300
 ggaactcatc aagagttgca atcattggga acataatttt taagttaccg tatacgctag 360
 cacgaagtaa tgcacgaagt tgtgtacgga acacatcttg ctcatcaaga cataagcgaa 420
 ttgcacggta gcccaagaac ggat 444

<210> 66
 <211> 457
 <212> DNA
 <213> Bacillus anthracis Sterne

<220>
 <221> misc_feature
 <222> (10)..(11)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (437)..(437)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (446)..(447)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (451)..(451)

<223> n is a, c, g, or t

<400> 66
actgcgcatt ngccttcttt atgagcagca tcgataacca tttttacaag acgtaaaata 60
gataggttat atggttggta taagtaagat acttggtcgt tcatacgggc tgcagccatt 120
gtgtattgaa ttaagtcatt tggtccgata gagaagaaat caacttcttt tgcgaattga 180
tctgctaata ctgctgaagc tgggatttca accatcatat caacttcaat agaatacagaa 240
acagttgtac ccacttctac aagtttcgct ttttcttcta ataagatcgc ttttgcttga 300
cggaactcat caagagttgc aatcattggg aacataattt ttaagttacc gtatacgcta 360
gcacgaagta atgcacgaag ttgtgtacgg aacacatctt gctcatcaag acataagcga 420
attgcacggt agcccangaa cggaatnttt ntcttaa 457

<210> 67
<211> 457
<212> DNA
<213> Bacillus anthracis

<220>
<221> misc_feature
<222> (1)..(2)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (4)..(5)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (15)..(15)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (23)..(23)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (437)..(437)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (445)..(445)
<223> n is a, c, g, or t

<400> 67

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nncnngcatg ggccntcttt atnagcagca tcgataacca tttttacaag acgtaaaata      60
gataggttat atggttggtgta taagtaagat acttggttcgt tcatacggtc tgcagccatt    120
gtgtattgaa ttaagtcatt tgttccgata gagaagaaat caacttcttt tgcgaattga      180
tctgctaata ctgctgaagc tgggatttca accatcatat caacttcaat agaatacagaa     240
acagttgtac ccacttctac aagtttcgct ttttcttcta ataagatcgc ttttgcttga      300
cggaactcat caagagttgc aatcattggg aacataattt ttaagttacc gtatacgcta      360
gcacgaagta atgcacgaag ttgtgtacgg aacacatctt gctcatcaag acataagcga      420
attgcacggt agcccangaa cgganctttt ttcttta                                457

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<210> 68
<211> 455
<212> DNA
<213> Bacillus anthracis Coda-Cerva

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<220>
<221> misc_feature
<222> (2)..(3)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (10)..(10)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (13)..(13)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (437)..(437)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (447)..(447)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (451)..(451)
<223> n is a, c, g, or t

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<400> 68
anntggcatn ggncttcttt atgagcagca tcgataacca tttttacaag acgtaaaata      60
gataggttat atggttggtgta taagtaagat acttggttcgt tcatacggtc tgcagccatt    120

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gtgtattgaa ttaagtcatt tgttccgata gagaagaaat caacttcttt tgcgaattga 180
tctgctaata ctgctgaagc tgggatttca accatcatat caacttcaat agaatacagaa 240
acagttgtac ccacttctac aagtttccgt ttttcttcta ataagatcgc ttttgcttga 300
cggaactcat caagagttgc aatcattggg aacataattt ttaagttacc gtatacgcta 360
gcacgaagta atgcacgaag ttgtgtacgg aacacatctt gctcatcaag acataagcga 420
attgcacggt agcccangaa cggatcnttt ntctt 455

<210> 69
<211> 458
<212> DNA
<213> Bacillus anthracis

<220>
<221> misc_feature
<222> (4)..(5)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (17)..(17)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (22)..(22)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (25)..(25)
<223> n is a, c, g, or t

<400> 69
tttningcat ggcgcctct tnatnagcag catcgataac catttttaca agacgtaaaa 60
tagatagggtt atatggttgg tataagtaag atacttggtc gttcatatcg tctgcagcca 120
ttgtgtattg aattaagtca tttgttccga tagagaagaa atcaacttct tttgcgaatt 180
gatctgctaa tactgctgaa gctgggattt caaccatcat accaacttca atagaatcag 240
aaacagttgt acccacttct acaagtttgc ctttttcttc taataagatc gcttttgctt 300
gacggaactc atcaagagtt gcaatcattg ggaacataat ttttaagtta ccgtatacgc 360
tagcacgaag taatgcacga agttgtgtac ggaacacatc ttgctcatca agacataagc 420
gaattgcacg gtagcccaag aacggatctt tttcttta 458

<210> 70
 <211> 445
 <212> DNA
 <213> *Bacillus cereus*

<400> 70
 gccttcttta tgagcagcat cgataacat ttttacaaga cgtaaaatag atgggttata 60
 tggttggtat aagtatgata cttgttcgtt catacggctt gcagccattg tgtattggat 120
 taaatcattt gttccgatag agaagaagtc aacttctttc gcgaattgat ctgctaatac 180
 tgctgaagct gggatttcaa ccatcatacc aacttcaata gaatcagaaa cagttgtacc 240
 cgcttctaca agtttcgctt tctcttctaa taaaatcgct ttcgcttgac ggaactcatc 300
 aagagttgca atcattggga acataatttt taagttaccg tatacgctag cacgaagtaa 360
 tgcacgaagt tgtgtacgga acacatcttg ctcatcaaga cataagcgaa ttgcacggta 420
 tccaagaac ggatcattct cgta 445

<210> 71
 <211> 438
 <212> DNA
 <213> *Bacillus cereus*

<400> 71
 ccatttcctt ctttatgagc agcatcgata accattttta caagacgtaa aatagatggg 60
 ttatatgggt ggtataagta tgatacttgt tcgttcatac ggtctgcagc cattgtgtat 120
 tggattaaat catttgttcc gatagagaag aagtcaactt ctttcgcgaa ttgatctgct 180
 aatactgctg aagctgggat ttcaaccatc ataccaactt caatagaatc agaaacagtt 240
 gtaccgcgtt ctacaagttt cgctttctct tctaataaaa ttgctttcgc ttgacggaac 300
 tcatcaagag ttgcaatcat tgggaacata atttttaagt taccgtatac gctagcacga 360
 agtaatgcac gaagtttgtt acggaacaca tcttgctcat caagacataa gcgaattgca 420
 cgatatccca agaacgga 438

<210> 72
 <211> 445
 <212> DNA
 <213> *Listeria monocytogenes*

<220>
 <221> misc_feature
 <222> (436)..(436)
 <223> n is a, c, g, or t

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<400> 72
gccctcttta tgagaagcat caattacat ttttactaaa cgtaagatgg atggattgta 60
tggttggttaa aggtaagaaa cgcgttcgtt catacgggcc gcagccattg tatactgaat 120
taagtcattt gttccgatag agaagaaatc aacttctttt gcaaattgat cagcaagaac 180
tgcagcggca ggaatttcaa tcataattcc aagttcgatg gaatcagata cttctgttcc 240
agcagctttt agttttgctt tctcatctag taaaatatca cgtgcttgac ggaattcatt 300
tactgttgca atcatcggga acataatttt taagttacca tatacacttg cgcgaaagtaa 360
ggcgcggaagt tgcgtacgga ataattcttc attcgcaaaa caaagacgaa ttgcgcggaa 420
tccaagaac ggatccttct cctta 445

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<210> 73
<211> 444
<212> DNA
<213> Streptococcus pneumoniae

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<220>
<221> misc_feature
<222> (423)..(423)
<223> n is a, c, g, or t

```

```

<220>
<221> misc_feature
<222> (425)..(425)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (442)..(442)
<223> n is a, c, g, or t

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<400> 73
cgcgtgagct gctttgatcc attgttaatc aagcgtagga ttgatgggtt gtatggtttg 60
taaaggatatg aaacttggtc gttcatcacg tctgctgcc a ttgtatattg gatcaagtca 120
tttgtaccaa ttgagaagaa gtcaacttct ttagcaaatt ggtctgcaag catagccgct 180
gcaggaatct cgatcatgat accaacttga atgttatccg caactgcaac accttcagca 240
agaagggttg ctttttcttc atcaaagact gctttcgctg cacggaattc tttcaagagc 300
gcaaccattg ggaacatgat acgcaattga ccgtgaacag acgcacgaag aagagcacgg 360
atttgtgtgc ggaacatagc atctccagtc tcagagatag agatacgaag agcacggaat 420
ccnangaacg gatccttttt cnta 444

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<210> 74
 <211> 441
 <212> DNA
 <213> Streptococcus pyogenes

<220>
 <221> misc_feature
 <222> (419)..(419)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (431)..(431)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (436)..(436)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (439)..(439)
 <223> n is a, c, g, or t

<400> 74
 tgcgctgctt tgatacattg ttgatcaaac gtaatattga tgggttggtat ggttggtaaa 60
 ggtatgatac ttgttcgttc atacggctctg ctgccatagt gtattggata aggtcgtttg 120
 ttccaattga gaagaaatca acttccttag caaattggtc tgcaagcata gcagctgcag 180
 gaatctcaat catgatacca acttgatgt catcagcaac cgcaacgcct tctgcaagca 240
 agtttgcttt ttcttcgtca aagactgctt ttgcagcacg gaattcttta agaagcgcaa 300
 ccattgggaa cataatacga agttgtccgt gaacagaggc acgaagaagc gcacgcattt 360
 gtgtgcggaa catggcatcc ccagtttcag agatggaaat acgaagagca cggaaaccna 420
 agaacggatc nttttncnt a 441

<210> 75
 <211> 440
 <212> DNA
 <213> Streptococcus agalactiae

<220>
 <221> misc_feature
 <222> (431)..(431)
 <223> n is a, c, g, or t

<220>

<221> misc_feature
 <222> (438)..(438)
 <223> n is a, c, g, or t

<400> 75
 gagcagcttt gataacgttg ttaatcaaac gaaggattga tggattgtat ggttgataga 60
 ggtatgaaac ttgctcattc atacgggtccg cagccattgt gtattggata agatcattag 120
 taccaattga gaagaaatca acttcttttg caaattggtc tgcaagcata gctgccgctg 180
 ggatttcaat cataatacca acttcaatgc cttcagctac tgctacaccg tcagctaaca 240
 agttcgcttt ctcttcttca aatatagctt tagcagcacg gaattcttta agcaaagcaa 300
 ccattgggaa catgatgcgt agctgtccat gaactgaagc acgaagaagt gctcggattt 360
 gtgtgcggaa cattgcatca ccagtttcag aaattgaaat acgcaatgca cggaatccca 420
 agaacggatc ntttttonta 440

<210> 76
 <211> 439
 <212> DNA
 <213> Streptococcus mutans

<400> 76
 tgagcagcct taacccatga tcaaccaagc gaagaatgga tggattataa ggttggtaga 60
 ggtatgatac ttgttcattc atacgggtcag cagccatggt gtattgaata aggtcatttg 120
 taccgattga gaagaaatca acttccttag caaattggtc agccaacatt gcagctgcag 180
 gaatttcaat catgatacca acttgatat catctgaaac agcaacgcct tcagctttaa 240
 gattagcctt ttcttcttcc agaatacctt tagctttacg gaactcattg agcaaagcta 300
 ccattgggaa catgatacgc aactgaccat gaacagaagc acgcaaaagg gcacgcaact 360
 gtgtgcggaa catctgattg cctgtttctg agattgaaat acgaagtgca cgaaaaccaa 420
 agaacggatc attctctta 439

<210> 77
 <211> 445
 <212> DNA
 <213> Enterococcus faecalis

<220>
 <221> misc_feature
 <222> (436)..(436)
 <223> n is a, c, g, or t

<400> 77

cgctcgtgtgc tgcatacaatt acattttttaa ttaaaccgtaa gattgatggg ttgtatgggt 60
 ggtataagta agaaacgcgt tcgttcatac ggtctgccgc cattgtgtat tggattaagt 120
 cgttgggttcc aacactaaag aagtctactt ctttggcaaa tttatcagct aatacggcag 180
 ctgctggaat ttcaatcata atacctactt ggatatcggt tgaaacttca acaccttcgt 240
 tgactaattt ttgtttttcg tcttcaaaga ttgctttcgc tgctctaaat tctttcaaag 300
 tagcaaccat tgggaacatg atacgtaagt taccatgaac agacgcacgt aataatgcac 360
 gcatttgtgt acggaacatg ccgtcaccta gttctgataa gctaatacgt aatgcacggt 420
 aaccaagaa cggnatnattc tcgta 445

<210> 78
 <211> 448
 <212> DNA
 <213> Staphylococcus aureus

<220>
 <221> misc_feature
 <222> (1)..(2)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (6)..(6)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (438)..(438)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (441)..(441)
 <223> n is a, c, g, or t

<400> 78
 nnccntctt atgtgacgct tcaataactt gtttaactaa acgtaagatt gaagggttat 60
 atgggttggt tagatatgat acacgctctg acatacggtc agcagctaata gtgtattgaa 120
 ttaaatcatt tgtaccgata ctgaagaaat ctacttcttt agcaaagaca tcagctaata 180
 ctgctgttgc aggtatctct accatgattc ctaattctat atcatccgaa atgtcatgac 240
 cttcattttt aagggttttct ttttcttcta ataatatagc ttttgcttct cttaaattcgt 300
 taattgttgc aaccattggg aacatgatat ttaacttacc ataaactgat gcacgtaata 360
 atgcacgtag ctgtgggtctg aaaatatctt gttgcgcaag gcataaacga atcgacggt 420

aacccaagaa cggatccntt ntccttaa

448

<210> 79
<211> 443
<212> DNA
<213> *Staphylococcus epidermidis*

<220>
<221> misc_feature
<222> (434)..(434)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (439)..(439)
<223> n is a, c, g, or t

<400> 79
cttctttatg agaagcttca ataacttggt taactaatcg taaaattgaa ggattatatg 60
gttgatataa gtatgaaact cgttcagaca tacggtcagc agctaattgtg tattgaatta 120
agtcattcgt tcctatacta aagaaatcta cttcttttagc aaatacatca gcaagtgccg 180
cggtagctgg aatttcaacc ataataccta attcaatata atctgaaact tcgtaacctt 240
cgccaagaag attttctttc tcttcaagaa gcattgattt agcgtcacgg aattctttaa 300
ttgttgctac cattgggaac ataatatcca atttccata gactgaagca cgtagtaatg 360
cacgtaattg tggctctaaag atttccgggt gtgctaaaca taaacgtatc gcacgataac 420
ccaagaacgg atcnttctnc gta 443

<210> 80
<211> 440
<212> DNA
<213> *Bacillus thuringiensis* serovar *israelensis*

<220>
<221> misc_feature
<222> (437)..(437)
<223> n is a, c, g, or t

<400> 80
ctttatgagc agcatcgata accattttta caagacgtaa aatagatggg ttatatgggt 60
ggatataagta tgatacttgt tcgttcatac ggtctgcagc cattgtgtat tggattaaat 120
cattcgttcc gatagagaag aaatcaactt ctttcgcgaa ttgatctgct aatactgctg 180
aagctgggat ttcaaccatc ataccaactt caatagaatc agaaacagtt gtacccgctt 240

ctacaagttt cgctttctct tctaataaaa tcgctttcgc ttgacggaac tcatcaagag 300
 ttgcaatcat tgggaacata atttttaagt tgccgtatac gctagcacga agtaatgcac 360
 gaagttgtgt acggaacaca tcttgctcat caagacataa gcgaattgca cggatatcca 420
 agaacggatc atttctntta 440

<210> 81
 <211> 440
 <212> DNA
 <213> Bacillus thuringiensis serovar kurstaki

<400> 81
 gccattttcc ttctttatga gcagcatcga taaccatttt tacaaggcgt aaaatagatg 60
 gattatacgg ttggtataag taagatacac gttcattcat acggtctgca gccattgtgt 120
 attggattag gtcgtttgtt ccgatagaga agaaatcaac ttcttttgca aactgatctg 180
 ctaatactgc agaagcggga atttctacca tcatacctac ctcaatagca tcagaaacag 240
 ttgtaccagc ttgaacaagt ctttctttct cttctaataa aattgctttt gcttgacgga 300
 attcatcaag agttgcaatc attgggaaca taatttttaa attaccatat acgcttgacac 360
 gaagcaatgc acgaagttgt gtacggaaca catcttgttc ttcaaggcat aagcgaatcg 420
 cacggttaacc caagaacgga 440

<210> 82
 <211> 446
 <212> DNA
 <213> Staphylococcus hominis

<220>
 <221> misc_feature
 <222> (2)..(2)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (5)..(6)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (428)..(428)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (441)..(441)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (444)..(444)

<223> n is a, c, g, or t

<400> 82

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cncncnccctt atgaggaagc ttcaataacc tgtttaacta aacgtaaaat tgctggatta      60
tatggttgat ataaatatga aacacgttca gacatacgat cagctgccat agtatattga      120
attaagtcac tagttcctat actaaagaaa tctacttctt tagcaaagat atcagctaac      180
gcagcagtag aaggaatctc taccatgata cctacttoga tatcatcagc aacttcttgt      240
ccttcgctag ttaattttatc tttttcttct aaaagaatag ctttagcatc tctaaactct      300
ttaatagtag ctaccattgg gaacataata ttttaatttac cataagcaga tgcgcgtaat      360
aacgcacgta attgtgttct gaagatgtct tgttgatcta agcacaaacg aattgcacga      420
taaccanga acggattcat ntenta                                         446
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<210> 83

<211> 445

<212> DNA

<213> Enterococcus faecium

<400> 83

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cgcggtgtgct gcatcaatta catttttgat caaacgtaaa attgatgggt tatatggttg      60
gtacaagtaa gaaacgcgtt cgttcatacg gtctgtgcc attgtgtatt gaatcaaatc      120
gttcgtacct acagagaaga aatctacttc ttttgcaaac ttgtctgcta agactgctgc      180
tgctggaatc tcgatcatga tgccgacttg gatcgtatca gatacttcct tgccttcact      240
gatcaatttt tgtttttctt cttcaaagat cgcttttgct gcgcggaatt ctttgagtgt      300
agctaccata gggaacatga tacgtaagtt accatgaaca gatgcacgaa gcaatgcacg      360
catttggtga cggaacattt cgtcgccttg ttcagataaa ctgatacgca atgcacgata      420
tcccaagaac ggatcattct cctta                                         445
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<210> 84

<211> 445

<212> DNA

<213> Clostridium perfringens

<220>

<221> misc_feature

<222> (2)..(2)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (434)..(435)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (437)..(438)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (441)..(441)

<223> n is a, c, g, or t

<400> 84

cntgtttgtg agctccatct attgtcattt tgattaatct taatacagct ggatgcattg 60

gattgtaaag gtatgatacc ttttcaactca ttctgtcagc agctaatagta tattgtatta 120

aatcgttagt tcctattgag aagaaatcaa catgcttagc taattcatca gcataaactg 180

ctgcagctgg gatttcaacc atgatacccc attgaattga atctgagtat gctatacctt 240

ctgcttttaa ctcagctttg cattcttcaa caaatgcttt agcttggttg aattcttcta 300

atcctgaaat cattgggaac attactgcaa gatttccata aacagaagct cttataaag 360

ctcttatttg aactctaaag atatcttttc tgtctaagca taatcttata gctctgtatc 420

ccaagaacgg atcnntnntc nttaa 445

<210> 85

<211> 440

<212> DNA

<213> Bacillus myco?es

<220>

<221> misc_feature

<222> (431)..(431)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (437)..(437)

<223> n is a, c, g, or t

<400> 85

ctttatgagc agcatcgatc accattttta caagacgtaa aattgatggg ttatatgggtt 60

gggtataagta agatacacgt tcgttcatac ggtctgcagc cattgtgtat tggattaagt 120

catttgttcc gatagagaag aaatcgactt cttttgcgaa ttgatctgct aatactgctg 180

aagctggaat ttcaaccatc ataccaactt caatagaatc agaaacagtt gtacccgctt	240
ggacaagtct ttctttctct tctaataaaa tcgctttcgc ttgacggaat tcatcaagag	300
ttgcaatcat cggaacata atttttaagt taccgtatac gctagcacga agtaatgcac	360
gaagttgtgt acggaacaca tcttgttctt caaggcataa gcgaattgca cggtatccca	420
agaacggatc nttctcntta	440

<210> 86
 <211> 451
 <212> DNA
 <213> Bacillus myco?es

<400> 86	
gccattttcc ttctttatga gcagcatcga taaccatttt tacaagacgt aaaatagatg	60
ggttatatgg ttggtataag taagctactt gttcgttcat acggtcgcga gccattgtgt	120
attggattaa atcatttggt ccgatagaga agaaatcaac ttcttttgcg aattgatctg	180
ctaatactgc agaagctgga atttcaacca tcataccaac ttcaatagaa tcagaaacag	240
ttgtaccgcg ttctacaagt ttgctttct cttctaataa gattgctttc gcttgacgga	300
actcatcaag agttgcaatc attgggaaca taatttttaa gttaccgtat acgctagcac	360
gaagtaatgc acgaagttgt gtacggaaca catcttgctc atcaagacat aagcgaattg	420
cacggtatcc caagaacgga tcattctctt a	451

<210> 87
 <211> 455
 <212> DNA
 <213> Streptococcus oralis

<220>
 <221> misc_feature
 <222> (2)..(3)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (434)..(434)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (446)..(446)
 <223> n is a, c, g, or t

<400> 87

cnntttccct tcgcgtgagc tgctttgata acgttggtga tcagcgtagg attgatgggt 60
 tgtatgggtg gtaaagggtat gaaacttgct cgttcatacg gtctgctgcc attgtgtatt 120
 ggatcaagtc gtttgtacca attgagaaga agtcaacttc tttagcaaat tgggtctgcaa 180
 gcattgctgc tgcaggaatt tcgatcatga taccaacttg gatattatcc gcaactgcaa 240
 caccttcagc aagaagggtt gctttttctt cgtcaaagac tgctttcgct gcacggaatt 300
 ctttcaagag cgcaaccatt gggaacatga tacgtaattg accgtgaaca gacgcacgaa 360
 gaagagcacg gatttgtgtg cggaacatag catctccagt ctcagagata gagatacgaa 420
 gagcacggaa tccnaagaac ggatcnnntt tcctta 455

<210> 88
 <211> 456
 <212> DNA
 <213> Enterococcus hirae

<220>
 <221> misc_feature
 <222> (2)..(2)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (447)..(447)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (450)..(450)
 <223> n is a, c, g, or t

<400> 88
 cnatttacct tcgcatgcgc tgcacgatc acgtttttaa tcaaacgtag gattgatggg 60
 ttgtaagggt gatacaagta tgaaacacgt tcgttcatac ggtcagctgc catagtgtat 120
 tggatcaagt cattcggtcc tactgagaag aagtcaactt ccttagcaaa cttgtcagct 180
 aagacagctg ctgctggaat ttgatcatg atgccgactt ggatcgtatc agatacttcc 240
 acgccttcat tcaataattt ttgtttttcg tcttcaaaga ttgcttttgc agcacggaat 300
 tctttaagag tcgctacat tggaacatg atacgtaagt ttccatgaac agatgcacgt 360
 aataatgcgc gcatttgcgt acggaacatt tcgtcacctt gttctgacaa gctgattcgt 420
 aatgcacgat agcccaagaa cggatcnnnt tcctta 456

<210> 89

<211> 457
 <212> DNA
 <213> Enterococcus avium

<220>
 <221> misc_feature
 <222> (2)..(2)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (7)..(7)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (447)..(447)
 <223> n is a, c, g, or t

<400> 89
 cnatttncct tcgcgtgcgc tgcatacaatc acgtttttga ttaagcgtag aattgatggg 60
 ttatatgggtt ggtaaaggta agaaacgcgt tcgttcatac ggtcagctgc catcgtgtat 120
 tgaattaagt catttggtcc gatactgaag aaatcaactt ctttggcaaa cttgtcagct 180
 agtacagctg cagctggaat ttcgatcatg attccgactt ggatcgatc agaaacttcc 240
 acgccttctt taaccaattt ttctttttct tcgttgaaca ttttcttcgc tgcacggaat 300
 tcttttaatg tcgcaaccat tgggaacatg atgcgtaagt taccatgaac agaagcgcg 360
 aacaatgcac gtaattgtgt acggaacatg tcatcgcta gttcggatag actaatacgc 420
 aatgcacgat aaccaagaa cggatccttt ttcttaa 457

<210> 90
 <211> 437
 <212> DNA
 <213> Staphylococcus saprophyticus

<400> 90
 tcgtaagaag cttctattac ttgttttact aaacgtaata ttgaaggatt atatggttga 60
 tacaagtaag aaacacgttc tgacattcta tcagcagcca ttgtatattg aattaaatca 120
 ttcgttccta tactgaagaa atcaacttct ttagcaata catctgccaa cgcagcagta 180
 gaaggaattt ctaccataat accaagtctg atatcatcag aaacttcaat gccttcattt 240
 gttaagttat ctttttcttc aagtaacaat gcttttagcat cacggaactc ttggattgta 300
 gctaccatag ggaacatgat attcaattta ccaaagcag atgcacgtaa taatgcacgc 360
 aactgtggtc tgaaaatatc aggttgatct aggcataaac ggatagcacg gtaaccaag 420

aacggatcat tctctta

437

<210> 91
<211> 430
<212> DNA
<213> Staphylococcus haemolyticus

<220>
<221> misc_feature
<222> (419)..(419)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (422)..(422)
<223> n is a, c, g, or t

<400> 91
gaagcttcat gacttgttta accaagcgta aaatagctgg gttataaggt tggataaagt 60
atgaaacgcg ttctgacata cggtcagctg ccatagtata ttgaattaaa tcattagtag 120
caatactgaa gaaatccatt tcttttagcaa agatatcagc taaagcagct gtagatggaa 180
tctcaaccat gatacctaac tcaatttcat cagaaacgtc atgaccatca tttttaagat 240
tttctttttc ttctaacaga atggcttttag catcacggaa ttcatgatt gtagctacca 300
ttgggaacat aatgtttaat ttaccgtaag ctgacgcgcg taataatgca cgtaattgtg 360
ttctgaaaat atcttggtga tctaagcata gacgaattgc tctgtaaccc aagaacggnt 420
cnttctctta 430

<210> 92
<211> 444
<212> DNA
<213> Enterococcus flavescens

<220>
<221> misc_feature
<222> (1)..(1)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (438)..(439)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (442)..(442)

<223> n is a, c, g, or t

<400> 92
ngcatgcgct gagtcgatca cgtttttgat caaacgtaaa attgatgggt tgtatggttg 60
gtacaagtaa gacacgcgct cgttcatgcg gtctgcagcc attgtgtatt ggatcaagtc 120
attggtacca ataactgaaga agtcaacttc cttcgcaaac ttgtctgcta agacagcagc 180
tgctggaatt tcgatcatga ttccgacttg gatctcgta gaaacctcaa cgccttcgtc 240
aatcaatttt tgacgctctt cttcatacat tttcttcgca gtacggaact ctttcaatgt 300
tgccaccatt ggggaacatga tacgtaagtt gccgtgagca gaagcacgta acaacgcacg 360
aagttgggta cggaacatgt catccccaag ttcagataag ctgatacgca atgcacgata 420
gcccaagaac ggatatttnt cnta 444

<210> 93
<211> 439
<212> DNA
<213> Enterococcus casseliflavus

<220>
<221> misc_feature
<222> (429)..(429)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (434)..(434)
<223> n is a, c, g, or t

<400> 93
gcgctgagtc gatacgtttt tgatcaaacg taaaattgat gggttgtatg gttggtacaa 60
gtaagacacg cgctcgttca tgcggtctgc agccatgggtg tattggatca agtcattggt 120
accaatactg aagaagtcaa cttccttcgc aaacttgtct gctaagacag cagctgctgg 180
aatttcgatc atgattccga cttggatctc gttagaaacc tcaacgcctt cgtcaatcaa 240
tttttgacgc tcttcttcat acattttctt cgcagtacgg aactctttca atgttgccac 300
cattgggaac atgatacgta agttgccgtg agcagaagca cgtaacaacg cacgaagttg 360
ggtagcgaac atgtcatccc caagttcaga taagctgata cgcaatgcac gatagcccaa 420
gaacggatna tttntctta 439

<210> 94
<211> 450
<212> DNA

<213> Enterococcus gallinarum

<220>

<221> misc_feature

<222> (6)..(6)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (443)..(443)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (447)..(447)

<223> n is a, c, g, or t

<400> 94

accttngcat gtgctgaatc gattacgttt ttgatcaacg tagaatagat gggttatatg 60

gttggttaaag atatgaaact tgttcattca tacgggtctgc agccattgtg tattggatca 120

agtcattggt accaatactg aagaagtcta cttccttggc aaatttgtca gctaagacag 180

ctgctgcagg aatttcgatc atgataccta cttgaatatc ttcagagacg gttacgcctt 240

catcgatcaa tttttgacgt tcttcttcgt acattttttt cgcagcacgg aactctttca 300

atgttgccac cattgggaac ataatccgca agtttccgtg agcagaagca cgtaacacgcg 360

cacgaagttg tgtacggaac atgccgtcac ccaactcaga caaactgata cgcaatgcac 420

gatagcccaa gaacggatct ttntccttta 450

<210> 95

<211> 443

<212> DNA

<213> Enterococcus raffinosus

<220>

<221> misc_feature

<222> (1)..(1)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (432)..(433)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (438)..(438)

<223> n is a, c, g, or t

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<400> 95
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caggatatgaa acgcgttcgt tcatacggtc agcagccatt gtgtattgaa tcaagtcgtt      120
tgttccgata ctaaagaagt caacttcttt tgcaaacttg tcagctagaa cagctgcggc      180
agggatctcg atcatgattc cgacttgaat cgtatcagaa accttcacgc cttcgttaac      240
aagcttttct ttttcttcgt tgaacatttt cttcgctgca cggaactctt ttaatgttgc      300
aaccattggg aacatgatgc gtaaattgcc atgaactgaa gcgcgtaaca atgcacgtaa      360
ctgtgtacgg aacatatcgt cgcctaattc agataaactg atacgcaatg cacgataacc      420
caagaacgga tnnttctnct taa                                              443

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<210> 96
<211> 453
<212> DNA
<213> Enterococcus villorum

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<220>
<221> misc_feature
<222> (3)..(3)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (14)..(14)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (432)..(432)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (434)..(434)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (441)..(441)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (451)..(451)
<223> n is a, c, g, or t

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<400> 96
ggnctctcgt cgtnagctgc atcaatcacg tttttgatta aacgtaaaat tgatgggtta      60

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taaggttggg ataagtatga aacgcgttcg ttcatacggg cagctgccat agtgtattga	120
atcaaatacat ttgttcttac tgagaagaag tcaacttcct tcgcaaactt gtcagctaaa	180
acagcagctg caggaatttc aatcataatg ccgacttgga tcgtatcaga tacttccacg	240
ccttcattca ataacttttg tttttcatct tcaaagattg cttttgcccc acggaattct	300
ttaagtgtcg ccaccattgg gaacatgata cgtaagttac cgtgaacgga tgcacgcaat	360
aacgcacgca tttgtgtacg gaacatttcg tctccttggt cagaaagact gatacgtaat	420
gcacgatatc cnangaacgg nttatttttc nta	453

<210> 97
 <211> 442
 <212> DNA
 <213> Clostridium difficile

<220>
 <221> misc_feature
 <222> (4)..(5)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (9)..(9)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (13)..(13)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (17)..(17)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (23)..(23)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (36)..(36)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (67)..(67)
 <223> n is a, c, g, or t

<220>

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<221> misc_feature
<222> (83)..(83)
<223> n is a, c, g, or t

<400> 97
tttnnggang gcntctntcg tangcattgt ctatancagt ctttataagt cttaaaacag      60
ctggatnaaa ttgattgtaa agntaactta tcttttgatt cattctatca actgcacaag      120
tgtattgaat taaatcatta gttcctatag agaagaaatc tacgtgttta gccaatatcat      180
cagatatcac agcagcagat ggaacttcta tcatcatacc aatttctaca tcttttagcat      240
aagccacacc ttcagaatca agttctgcta aaacttcttt tacaacttct ttagcttgta      300
acaactcttc taaagatgaa atcattggga acatgattct taatcttcca tgaacactag      360
ctctatataa agctctcaat tgagtcttaa atatatcttt tctatctagg caaagtctta      420
ttgctctgta acccaagaac gg                                              442

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<210> 98
<211> 444
<212> DNA
<213> Streptococcus mitis

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<220>
<221> misc_feature
<222> (1)..(1)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (424)..(424)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (442)..(442)
<223> n is a, c, g, or t

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<400> 98
ngcgtgagct gccttgataa cgttgttgat caagcgaagg attgatgggt tatatggttg      60
gtaaagggtat gaaacttgct cgttcatatc gtctgctgcc attgagtatt ggatcaagtc      120
gtttgttcca attgacatga agtctacttc ttttgcaaatt tgggtctgcaa gcatcgctgc      180
tgcagggatt tcaatcatga taccaacttg gatatcatcc gcaactgcaa caccttcagc      240
aagaaggttt gccttttctt cttcataaac tgctttggct gcacggaatt ctttcaaaag      300
agcaaccatt gggaacatga tacgcaattg accatgaaca gaagcacgaa gaagagcacg      360
gatttggtgta cggaacattg catctccagt ttcagaaata gagatacgaa gggcacggaa      420

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tccnaagaac ggatattttt cnta

444

<210> 99
<211> 446
<212> DNA
<213> Bacillus halodurans

<220>
<221> misc_feature
<222> (1)..(1)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (424)..(424)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (435)..(436)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (439)..(439)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (443)..(443)
<223> n is a, c, g, or t

<400> .99
nccttcgcta tgagctgctt taataaccat atcgacgagg cgtaaaatcg cagggtggtta 60
tggctgatac aggtaggaga ctgctcatt catgcgggtca gcagccatcg tatattgaat 120
taagtcgttc gttccgatac tgaaaaagtc tacttctttt gcaaaaagat tagccgctac 180
cgccgctgat gggatttcta ccatgattcc cacttcaatt gaatcggata cgtccactcc 240
ttcactaaga agcttgtctt tttcctcttg catgatcgct tttgcttggc gaagctcttc 300
aagggtgggc atcattggaa acatcacctt taagttaccg tatgtgcttg cgccaagcaa 360
ggcacggagt tgggtccgga aaatatcttg tttttcaagg cacagacgaa tcgcccggaa 420
accnaagaac ggatnnttnt tcntaa 446

<210> 100
<211> 436
<212> DNA
<213> Bacillus weihenstephanensis

<220>
 <221> misc_feature
 <222> (1)..(1)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (427)..(427)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (433)..(433)
 <223> n is a, c, g, or t

<400> 100
 ntgagcagca tcgataacca tttttacaag acgtaaaata gatggggttat atgggttgga 60
 taagtaagct acttggttcgt tcatacgggc tgcagccatt gtgtattgga ttaagtcatt 120
 tgttccaata gagaagaaat caacttcttt tgcgaactga tcagctaata ctgctgaagc 180
 tggaatttca accatcatat caacttcaat agaatacaga acagttgtac ccgctttaac 240
 aagtctttct ttctcttcta ataagattgc tttcgttga cggaactcat caagagttgc 300
 aatcattggg aacataattt ttaagttacc gtatacgcta gcacgaagta atgcacgaag 360
 ttgtgtacgg aacacatctt gctcatcaag acataagcga attgcacggt atcccaagaa 420
 cggatcnttc tcntta 436

<210> 101
 <211> 458
 <212> DNA
 <213> Streptococcus species

<220>
 <221> misc_feature
 <222> (2)..(3)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (5)..(5)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (8)..(8)
 <223> n is a, c, g, or t

<220>

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<221> misc_feature
<222> (435)..(435)
<223> n is a, c, g, or t

<400> 101
cnnanttncc ttgcgtgag ctgctttgat aacgttgta atcaacgaag gattgatggg      60
ttgtatgggt ggtaaaggta tgaaacttgt tcgttcatac ggtcagcagc catttgtgtat    120
tggataaggt cgtttgttcc gattgagaag aagtcaactt ctttcgcaaa ttggtcagca    180
agcatagctg cagctgggat ttcaatcatg ataccaactt ggatatcatc tgaaacggca    240
acaccttcag ctttaagggt tgctttttct tcatcaaaga ttgcttttagc agcacggaat    300
tctttaagaa gagcaacat tggaacatg atacgaagtt gtccgtgtac agatgcacga    360
agaagtgcac ggatttgtgt acggaacatt gcatttcctg tttctgagat agaaatacga    420
agtgcacgga atccnaagaa cggatccttt ttccttaa                             458

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<210> 102
<211> 446
<212> DNA
<213> Streptococcus gordonii

```

```

<220>
<221> misc_feature
<222> (1)..(1)
<223> n is a, c, g, or t

```

```

<220>
<221> misc_feature
<222> (431)..(431)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (442)..(442)
<223> n is a, c, g, or t

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<400> 102
ntgccttcgc atgagccgcc ttgataacat tgttgatcaa gcgaaggata gatggggttat    60
aaggttgata gaggtaagag acttgttcat tcatccggtc agctgccata gtgtactgga    120
tcaagtcgtt ggtaccaatt gagaagaagt caacttcctt ggcaaattga tccgccaaca    180
tagctgctgc tggaatttca atcatgatac ccacttgaat gttatccgct acagcaacac    240
cttcagcttg caatttcgct ttttcttctt cgtaaactgc tttagcctta cggaattctg    300
ttagaagggc taccattggg aacatgatac gtaattgtcc atgtacagac gcacgtaaga    360
gagcgcggat ttgtgtacgg aacatagcat taccagtttc agagatagag atacgcaaag    420

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cacggaagcc naagaacggt cntttt

446

<210> 103
<211> 446
<212> DNA
<213> Streptococcus canis

<220>
<221> misc_feature
<222> (2)..(2)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (424)..(424)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (435)..(435)
<223> n is a, c, g, or t

<400> 103
cncgtgagct gctttgataa cgttgttaat caaacgaagg attgatgggt tgtatggttg 60
gtaaaggat gaaacttggt cgttcatatc gtcagcagcc attgtgtatt ggataaggtc 120
gtttgttccg attgagaaga agtcaacttc tttcgcaaatt tggtcagcaa gcatagctgc 180
agctgggatt tcaatcatga taccaacttc gatatcatct gaaacggcaa caccttcagc 240
tttaaggttt gctttttctt catcaaagat tgcttttagca gcacggaatt cttaagaag 300
agcaaccatt gggaacatga tacgaagttg tccgtgtaca gatgcacgaa gaagtgcacg 360
gatttggtga cggaacattg catttctgtt ttctgagata gaaatacgaa gtgcacggaa 420
tccnaagaac ggtcnttttt ctctaa 446

<210> 104
<211> 437
<212> DNA
<213> Bacillus pumilus

<220>
<221> misc_feature
<222> (2)..(2)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (415)..(415)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (426)..(426)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (433)..(433)

<223> n is a, c, g, or t

<400> 104

cntacgctgc ttcataacaa gcgtaatcaa acgtaaaatc gctggattgt aaggctggta 60

aagataagac actcgttcgt tcattcgatc agcagccatt gtgtattgaa tcaaattcatt 120

tgttccaata ctgaagaaat caacttcttt tgcgaattgg tctgcgatga cagcgggtga 180

tggaatttct accattatac cgatttcaat ggaatcggat acgtctgtac cagcggcaac 240

caatgcttct ttttcttcaa gtaaaatggc ttttgcttct ctaaattctg ataatgtcgc 300

gatcataggg aacatgattt tcaagtttcc atatgtactt gcacgaagta aggcgcgtag 360

ttgtgttctg aaaatctcct gttcttcgag gcaaaggcgg atcgctctaa agccnaagaa 420

cggatntttt tcnttaa 437

<210> 105

<211> 437

<212> DNA

<213> Bacillus species

<220>

<221> misc_feature

<222> (426)..(426)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (429)..(429)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (431)..(431)

<223> n is a, c, g, or t

<400> 105

tgagcgcac gataaccatt tttacaagac gtaaaataga tgggttatat gggttggtata 60

agtatgatac ttgttcgttc atacgggtctg cagccattgt gtattggatt aaatcatttg 120

ttccgataga gaagaagtca acttctttcg cgaattgatc tgctaatact gctgaagctg 180

ggatttcaac catcatacca acttcaatag aatcagaaac agttgtaccc gcttctacaa	240
gtttcgcttt ctcttctaataaaaattgctt ttgcttgacg gaactcatca agagttgcaa	300
tcattgggaa cataatTTTT aagttaccgt atacgctagc acgaagtaat gcacgaagtt	360
gtgtacggaa cacatcttgc tcatcaagac ataagcgaat tgcacggtat cccaagaacg	420
gatccnttnt nctttaa	437

<210> 106
 <211> 443
 <212> DNA
 <213> Lactococcus lactis

<220>
 <221> misc_feature
 <222> (16)..(16)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (422)..(422)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (430)..(431)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (437)..(437)
 <223> n is a, c, g, or t

<400> 106	
gtgagctgct ttgatncatt gttaatcaaa cgaaggattg atggattgta aggttggtaa	60
aggtaagaaa cttgttcatt catacgtct gcagccattg tatattggat gaggtcgctt	120
gtaccaattg agaagaaatc aacttcctta gcaaattggt ctgcaagcat tgctgctgct	180
ggaatttcaa tcatgatacc tacttcgata ccatctgcaa ctggaacacc ttcagcaatc	240
aattttgctt tttcttcgtc ataaatcttc ttagctgcac ggaactcagt tacgagagca	300
accattggga acatgatacg aagttgtccg tgtacagaag cagcaagag tgcacgcaat	360
tgtgtacgga acattccgtc accagctgtt gaaaggctga tacgaagtgc acgccatccc	420
angaacggtg nttttnttt taa	443

<210> 107

<211> 454
 <212> DNA
 <213> Bacillus firmus

<220>
 <221> misc_feature
 <222> (8)..(8)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (16)..(16)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (19)..(19)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (22)..(22)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (449)..(449)
 <223> n is a, c, g, or t

<400> 107
 tccaggangg gttctntcnt angtgcgctc aattaccatt ttaactaaac gcaggattgc 60
 aggattatac ggctggtaaa ggtaagaaac acgctcattc atgcgggtctg cagccattgt 120
 gtactgaatt agatcattag tgccaacact gaagaaatcg acttcttttag caaactgac 180
 agccataaca gcagttgaag gaatttcaac cataattcca atttcaatgt tgtcgggcaac 240
 ctctgctcct tcgctcaciaa gcttttggtt ttcttcttca aggattgctt tgccctgacg 300
 gaattcttca agagtggcaa tcatagggaa catgatttta aggtttccat aggtgcttgc 360
 tcttaataaaa gcccttaatt gcgtcctgaa catatcctgt tcttccagac acagacgaat 420
 cgcccggaag cccaagaacg gattcattnt cttta 454

<210> 108
 <211> 434
 <212> DNA
 <213> Haemophilus influenzae

<220>
 <221> misc_feature
 <222> (425)..(426)

<223> n is a, c, g, or t

<400> 108

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tgagaggcat caatcacttg ttttaattaaa ccaagcacag aggggtgcat cggattataa    60
agatgggaaa taaactcatt accgcgatct acagccaaag tatattgagt taaatcgтта    120
gtaccgatac taaagaaatc cacttctttt gctaaaaatt ttgcatttac tgcggcagag    180
ggggtttcga ccattacacc aacttggata ttattatcaa acagtctccc ctcttcacgt    240
aattccgctt ttaatgtttc aataaccgct ttttaattccc gaatttcttc tacagaaata    300
atcatcgгga acattaccgc caatttacca aaagctgaag cacgtaacac cgcgcgtaat    360
tgtgcattta aaatttcacg acgatctaат gcaatgcgaa tcgcacgcca tccaagaac    420
ggatnntttt tctt                                                    434
```

<210> 109

<211> 442

<212> DNA

<213> Streptococcus bovis

<220>

<221> misc_feature

<222> (420)..(420)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (432)..(432)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (438)..(438)

<223> n is a, c, g, or t

<400> 109

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tgagctgctt tgataacgтt gttaatcaaa cgaaggattg atgggttata tggttggtaa    60
aggтatgaaa cttgttcatt catacggtca gcagccattg tgtattggat aaggтcgttt    120
gttccgattg agaagaagtc aacttctttt gcaaattggt cagcaagcat agctgcagct    180
gggatttcaa tcatgatacc aacttggata tcatctgaaa cggcaacacc ttcagcttta    240
aggтtagctt tttcttcatc aaagattgct ttagcagcac ggaattcttt aagaagtgca    300
accattggga acatgatacg aagttgtccg tgtacagatg cacgaagaag tgcacggatt    360
tgtgtacgga acattgcatt tcctgtttct gagatagaaa tacgaagtgc acggaatccn    420
aagaacggгc cntttttnct ta                                                    442
```

<210> 110
 <211> 443
 <212> DNA
 <213> Enterococcus durans

<220>
 <221> misc_feature
 <222> (431)..(432)
 <223> n is a, c, g, or t

<400> 110
 tgtgctgcat caatcacgtt tttgatcaaa cgtaaaattg aagggttata aggttgatac 60
 aagtaagata cacgttcggt catgcggtca gctgccattg tgtattgaat caagtcattc 120
 gtacctactg agaagaagtc aacttccttc gcaaacttat ctgctaagac agctgctgca 180
 gggatttcaa tcatgatgcc gacttggatc gtatcagata cttccacgcc ttcgctcact 240
 aatttttgtt tttcttcttc aaagattgct ttcgctgcac ggaattcttt aagagtcgct 300
 accattggga acatgatgcg taagtttcca tgaacagatg cacgtaacaa tgcgcgcatt 360
 tgtgtacgga acatttcgtc acctaattca gacaagctga tacgtagcgc acgatagccc 420
 aagaacggat nnttttccct taa 443

<210> 111
 <211> 450
 <212> DNA
 <213> Streptococcus sanguis

<220>
 <221> misc_feature
 <222> (434)..(435)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (441)..(441)
 <223> n is a, c, g, or t

<400> 111
 cgcatgagct gccttgataa cattgttaat caagcgaagg atagatggat tgtaagggtg 60
 atagaggtaa gagacttgct cattcatccg gtcagccgcc atagtgtact gaatcaagtc 120
 gttagtacca attgagaaga agtctacttc cttggcaa attgatccgcca acatagctgc 180
 tgctgggatt tcaatcatga taccacttg gatattatct gctactgcaa cgccttcagc 240
 ttgcagctta gctttttctt cgtcataaac cgcttttagct ttgcggaatt ctgtcagaag 300

ggccaccatt gggaacatga tacgcaattg tccatgtaca gaagcacgca agagagcgcg 360
gatttgtgta cggaacatag catcgccagt ttcagagata gagatacgca aagcacggaa 420
accaagaac ggtntttttt ntctttaaaa 450

<210> 112
<211> 453
<212> DNA
<213> Enterobacter cloaceae

<220>
<221> misc_feature
<222> (440)..(441)
<223> n is a, c, g, or t

<400> 112
tcctttacct tctgcatgag agcatcaata acttgcttga tcaagttcag tacggacggt 60
gacattggct ggtagagatg tgaaatcata tcattaccac ggtcaactgc caggggtgtac 120
tgcgttaa at cattggtgcc gatactaaag aaatcaactt ctttggctaa atgacgcgca 180
atggtcgcgg ctgctggtgt ttccaccatt acgccgatct caattgactc gtcaa atgct 240
ttaccttcgt cacgcaattc ctgtttgtag atctcgatct ctttcttcag tgcacgcact 300
tcttcaacag agatgatcat cgggaacata atgcgcagct taccgaaagc agaggcacgc 360
agaatgcac gcacctggtc acgcaggatt tctttacgat ccatggcgat acgcactgca 420
cgccagccca agaacggatn nttttttctt taa 453

<210> 113
<211> 449
<212> DNA
<213> Serratia liquefaciens

<220>
<221> misc_feature
<222> (1)..(1)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (4)..(4)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (17)..(17)
<223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (427)..(427)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (435)..(435)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (438)..(438)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (445)..(445)
 <223> n is a, c, g, or t

<400> 113
 ntgncttctg catgagnatg catcaataac ctgtttgatc aggccaagca ctgatgggga 60
 catcgggtta tagagatgag aaatcagctc attgccgcga tctaccgcca gagtatactg 120
 ggttagatcg tttgtcccaa tactaaagaa gtcgacttct ttgccaggt gatgagcaat 180
 cactgccgcg gccggtgttt ccaccattac gccacttca atgggtctcgt caaaggcctt 240
 ggattcttca cgcagctgcg ccttcagcgt ctcgatttca cctttcagat cgcggacttc 300
 ttccacggaa atgatcatcg ggaacatgat gcgcagtttg ccgaacgcgg aagcgcgcag 360
 gatggcgcgc agttgcgcgt gcaggatttc tctgcggtcc atggcgatac gaatcgcgcg 420
 ccagccnaag aacgnttntt tttanttta 449

<210> 114
 <211> 436
 <212> DNA
 <213> Proteus mirabis

<220>
 <221> misc_feature
 <222> (427)..(427)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (431)..(431)
 <223> n is a, c, g, or t

<400> 114
 gtgtgatgca tcaatcacct gtttaatcag attaagtaca gcaggtgaca ttggattata 60

tagatgagat atcagctcat ttccacggtc tacagccaga gtatattgtg ttagatcggt	120
agtcccaata ctgaaaaagt caacttcttt tgccatatgg cgagccataa cagccgctgc	180
tggcgtttca accataacac cgacttcgat agattcatca aaaggcttat tttcttcacg	240
aagctggctt ttcagtatct caagttccgc tttcaatgct cggatctctt caacagagat	300
aatcattgga aacataatac gtagtttacc aaaagcagac gctcttaaga tagcacgtaa	360
ttgtggatga aggatctctt tgccgtcaag acaaatacga attgcacgcc aaccaagaa	420
cggatccttt ntcctt	436

<210> 115
 <211> 431
 <212> DNA
 <213> Providencia stuartii

<400> 115	
gcctctgcat gtgatgcac aatgacttgc ttaatcagtt caatacagca ggcgacattg	60
gattgtagag gtgagaaatc agctcattac cacgggtcaac agctagagta tattgagtga	120
gatcgttcgt cccaatactg aaaaagtcaa cttcttttgc taaatgatga gcaataaccg	180
ctgcggcagg ggtttccacc atgacaccaa cttcgattga ttcacaaag gctttgcctt	240
cttcacgtaa ttgacctttt agcatctcaa gttctgcttt tagttcgcca acttcctcaa	300
cggaaataat catcggaac ataatacgc gtttaccaa acttgaggct cttaaaatag	360
ctcttaactg agaatgtaga atttctttgc gatcaaggca aatacgaatt gcccgccagc	420
ccaagaacgg t	431

<210> 116
 <211> 446
 <212> DNA
 <213> Proteus vulgaris

<220>
 <221> misc_feature
 <222> (434)..(435)
 <223> n is a, c, g, or t

<400> 116	
ccttctgcat gtgatgcac aataacctgt tttatcaggt taagtactgc tggtgacatt	60
ggattataca gatgagatat cagctcattt ccacgggtcta cagccagagt atattgtgtt	120
agatcgtagg tccaatact gaaaaagtca acttcttttg ccatgagacg tgccattacg	180

gccgcgcag gggtttcaac catgacaccg acttcgatag actcatcgaa agttttgttt 240
tctgcacgaa gctggctttt cagtatttca agttctgctt tcaatgcgcg aatctcttca 300
atagagataa tcattggaaa cataatgcgt agtttaccaa aagcagatgc tcttaagata 360
gcacgtaatt gcgaatgaag gatctcttta cggtaagac aaatacgaat tgctctccaa 420
cccaagaacg gtcnnttttt ttctta 446

<210> 117
<211> 458
<212> DNA
<213> *Staphylococcus simulans*

<400> 117
ttctccgcac atacctgtcc atttaccttc agcatgagac gcttcgataa cacgttgtac 60
caagcgtaaa atagctgggt tatatgggtg gtataaataa gacacacgtt ctgacatacg 120
gtcagctgcc attgtatatt ggattaagtc atttggtccg atactgaaga agtctacttc 180
tttcgcaaag acatcagcaa gtgctgctgt cgatggaatt tcaaccatga taccgacttc 240
gatatcatct gaaacttcaa caccttcatt ttttaagggtt tgacgttctt cttctaataa 300
tgctttcgca tcacggaatt cttgaattgt cgcaaccatt gggaacataa tgtttaattt 360
tccgtatact gaagcacgta ataacgcgcg taattgcgga cggaaaattt ctgggtgtgc 420
taagcacaag cggattgcac gataacccaa gaacggat 458

<210> 118
<211> 454
<212> DNA
<213> *Staphylococcus sciuri*

<400> 118
ctccgcacat accagtccat ttaccttctt tatgagaagc ttcaattact tgcttaacta 60
agcgaagaat tgcagggtta tatgggttgg ataagtaaga aacacgctca gacatacggc 120
cagcagccat tgtatattgg attaaatcat tcgtaccaat actgaagaaa tcaacttctt 180
tagcaaagat gtctgcaagt gctgcagtag atggaatttc taccataata ccgatttcga 240
tatcatccgc aacgttaaca ccttcagaaa ctaatttttc tttttcctca agtaagattg 300
cttttagcatc tctaaattct ttaatagttg caatcatagg gaacatgata ttttaacttac 360
caaattcaga tgcgcgtaat aaagctctta attgtgttct aaagatttca gtttgatcta 420
aacataaacg aatcgctcta tatcccaaga acgg 454

<210> 119
 <211> 454
 <212> DNA
 <213> *Staphylococcus capitis capitis*

<400> 119
 tccgcacata ccagtcatt taccttcttt atgagaagct tcaatgactt gcttaacaag 60
 acgtaatata gatgggttat atggttgata taaataagat acacgctctg acatacgatc 120
 agcagctagt gtatattgaa ttaaattcatt tgtaccaata ctaaagaaat ctacttcctt 180
 cgcaaagaca tctgctaatag cagcagttgc tgggaatttca accatgatac ctaattcaat 240
 atcatcagaa atgtcataac cttcattttc aagggttttc ttttcctcta aaagaattgc 300
 tttggcatca cggaattcctt taatagtagc aaccattggg aacatgatat ttaatttacc 360
 gtaagcagat gcacgtaata atgcacgtaa ttgcggtcta aaaatatcctt gttgagctaa 420
 acataaacga attgctctat aaccaagaa cgga 454

<210> 120
 <211> 464
 <212> DNA
 <213> *Staphylococcus warneri*

<400> 120
 ccgcacatac cagtcattt accttctttg tgagaagctt caatgacttg ttttactaag 60
 cgtaaaattg aagggttgta tggttgatat aagtaagata cacgttcaga catacgggtca 120
 gctgctaata tgtattggat taagtcattt gtaccaatac taaagaaatc tacttcttta 180
 gcaaatacat cagctaatagc tgctgtcgct ggtatttcaa ccatgatacc taactcaata 240
 tcttcagaaa cttcataacc ttcattttga agattttcctt tttcttctaa taacattgct 300
 ttagcatcac ggaattcctt gatagttgct accattggga acatgatatt taatttacca 360
 taaactgatg cacgtaataa cgcgcgtaat tgtggtctga aaatatcagg ttgagctaag 420
 caaagacgaa tcgctctgta tccaagaac ggatcattct cttta 464

<210> 121
 <211> 454
 <212> DNA
 <213> *Staphylococcus cohnii urealyticus*

<220>
 <221> misc_feature
 <222> (453)..(453)
 <223> n is a, c, g, or t

```

<400> 121
ccgcacattc cagtccattt gccttcttta tgagaagcat caatcacttg ttgcactaaa      60
cgtaaaattg ctggattgta tggttgatac aagtaagata ctgctctga catacgatcc      120
gcggccattg tatattgaat taaatcggtc gttccgatgc tgaagaaatc tacttcttta      180
gcaaaaacat ctgctaagtc tgcagttgaa ggaatttcta ccatgatacc aacttctata      240
tcatacagata cttcaatacc ttcatTTgtt aaattttctt tttcctctaa taacaatgct      300
ttcgcatcac ggaattcttt aattgtcgct accattggga acataatatt taaattccca      360
taagctgacg cacgtaataa agcacgcaat tgcggtctga aaatgtcagg ttgatctaaa      420
cataaacgaa tcgcacggta tccaagaac ggnt                                     454

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<210> 122
<211> 443
<212> DNA
<213> Staphylococcus schleiferi scheiferi

```

```

<400> 122
ccgcacatac ctgtccattt accttcttta tgagatgctt caattacttg cttactaag      60
cgtaaaattg aaggattgta aggttggtaa agatatgata cacgttctga catacgggtca      120
gctgccatcg tatattgaat taagtcattc gttccaatac taaagaagtc aacttcttta      180
gcaaaaacat cagctaaagc tgctgtagat ggaatttcca ccataatacc taactcaata      240
tcatacgttaa cttcaacgcc ttcttgTTTT aagttttctt tttcttcaag aagaagcgct      300
tttgcacgcg ggaattcttt aatcgtagca accattggga acataatggt cagttttccg      360
taagttgaag cgcgtaataa cgctcttaat tgtggacgga aaatttcagg ttgatctaaa      420
caaagacgaa ttgcacggta tcc                                             443

```

```

<210> 123
<211> 459
<212> DNA
<213> Staphylococcus intermedius

```

```

<220>
<221> misc_feature
<222> (67)..(67)
<223> n is a, c, g, or t

```

```

<220>
<221> misc_feature
<222> (234)..(234)
<223> n is a, c, g, or t

```

<400> 123
 ccgcacatac ctgtccattt gccctcttgg tgagaagcgt caatcacttg ttttaattaaa 60
 cgtaagnatt gatggattat atggttggta aagataagat acacgttctg acatacggtc 120
 tgcagccatt gtgtattgaa ttaaatacgtt tgtaccgata ctgaagaaat ccacttcttt 180
 cgcaaataca tctgcaagtg cggctgttgc agggatttca accatgatac ctanttcgat 240
 atcgtcgctc acttctacgc cttcttggtt caagttttcc ttttcttcaa gaagtaacgc 300
 tttcgcatca cggaattctt gaatcggtgc caccattggg aacataatat tcaatttacc 360
 gtatgctgaa gctcttaata atgcacgtaa ttgtggacgg aaaatttcag gttgatctaa 420
 acataaacga atgcacgggt aaccaagaa cggattcat 459

<210> 124
 <211> 458
 <212> DNA
 <213> *Staphylococcus cohnii cohnii*

<220>
 <221> misc_feature
 <222> (446)..(446)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (453)..(453)
 <223> n is a, c, g, or t

<400> 124
 ccgcacatcc ctgtccattt accttcttta tgactggcat caataacttg tttcatcagt 60
 ctaagaatcg ctgggttata aggctggtaa agataagaga cgcgttcact catacgggtct 120
 gcagccatcg tatattgaat aagatcattc gtaccgatac taaagaaatc aacctctttc 180
 gcaaagatat cggccattgc tgctgtagaa ggaatctcta ccatgatgcc aagctcgata 240
 tcgtcagcaa ctttaacttt atctgcaatt aaattggctt tctcttcttc taagattgct 300
 ttcgcatcac ggaattcggt gatagtcgca atcatcggga acatgatgct cagtttaccg 360
 tggatggatg cacgtaataa cgcacgaagc tgtgttctaa agatatcctg ctgatccaga 420
 caaagtcgaa tcgcacggta tccaangaac ggnttcac 458

<210> 125
 <211> 464
 <212> DNA
 <213> *Staphylococcus capitis uralyticus*

<220>
 <221> misc_feature
 <222> (453)..(453)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (459)..(459)
 <223> n is a, c, g, or t

<400> 125
 ccgcacatac cagtccattt accttcttta tgagaagcct ctattacttg cttaacaaga 60
 cgtaaaatag aaggattata tggttgatat aaataagata cacgttctga catacgatca 120
 gcagctagtg tgtattgaat taagtcatta gtaccgatac taaagaagtc tacttccttc 180
 gcaaagacat ctgctaatgc agcagttgct ggaatttcaa ccatgatacc taattcgata 240
 tcgtcagaaa tgtcataacc ttcatTTTTca aggtttttct tttcttctaa aagaatcgct 300
 ttagcatcac ggaattcttt gatagtagca accattggga acatgatatt taatttaccg 360
 taagcagatg cacgtaataa tgcacgtaat tgcggtctga aaatatcttg ttgcgctaaa 420
 cataaacgaa ttgctctata acccaagaac ggnttcatnt ctta 464

<210> 126
 <211> 440
 <212> DNA
 <213> Staphylococcus gallinarum

<220>
 <221> misc_feature
 <222> (435)..(435)
 <223> n is a, c, g, or t

<400> 126
 ccgcacatac ctgtccattt accttgTTta actaaacgta aaattgaagg attatatggt 60
 tgatacaagt atgatacacg ttctgacatt ctatctgcag ccatagtgta ttgaattaaa 120
 tcatttgtac cgatactaaa gaagtcaacc tcttttagcaa atacatcagc taaagctgct 180
 gtagaaggaa tttctaccat gataccta atcgatatcat cagatacttc aacaccttct 240
 tgtgttaaat tgtccttctc ttcaagaagt aatgcttttg catcacggaa ctcttgaatt 300
 gtagcaacca ttgggaacat gatatttaac ttaccgaatg cagatgcgcg taataatgca 360
 cgcaattgcy gtctgaaaat atcaggttga tccaagcata aacgtatcgc acgatatccc 420
 aagaacggat tcatntctta 440

<210> 127
 <211> 462
 <212> DNA
 <213> *Staphylococcus auricularis*

<400> 127
 ccgcacatgc cagtccatth accttcttta tgagaagctt cgatgacttg tttgctcaac 60
 caagcgtaaa atagctggat tatatgggtg ataaagggtat gatacgcgtt ctgacatgcg 120
 gtctgcagcc attgtatat gaattaagtc gtttgtaccg atactaaaga agtcgacttc 180
 tttcgcaaag acatctgcta aagcagctgt tgatggaatt tcgaccataa tacctaattc 240
 aatatcatct gagacttcaa ctccctcttg ttctaagttt gctttttctt cttccaacaa 300
 tgcttttagca tcacggaatt cttgaattgt cgcaaccatt gggaacatga tattgagttt 360
 tccgtacgta gatgcacgta ataatgcacg taattgtgga cggaaaatat caggttgatc 420
 taagcataaa cgaatcgcac gataacccaa gaacggattc at 462

<210> 128
 <211> 457
 <212> DNA
 <213> *Staphylococcus caseolyticus*

<400> 128
 ccgcacatcc ctgtccatth accttcttta tgactggcat caataacttg tttgatcagt 60
 ctaagaatcg ctgggttata gggctggtaa agataagaga cgcgttcact catacgggtc 120
 gcagccatcg tatattgaat aagatcattc gtaccgatac taaagaaatc aacctctttc 180
 gcaaagatat cggccattgc tgctgtagaa ggaatctcta ccatgatgcc aagctcgata 240
 tcgtcagcaa ctttaacttt atctgcaatt aaattggctt tctcttcttc taagattgct 300
 ttgcgcatcac ggaattcggt gatagtcgca atcattggga acatgatgct cagtttaccg 360
 tggatggatg cagtaataa cgcacgaagc tgtgttctaa agatatcctg ctgatccaga 420
 caaagtcgaa tcgcacggta tccaaagaac ggattca 457

<210> 129
 <211> 436
 <212> DNA
 <213> *Staphylococcus xylosus*

<400> 129
 tgtgaagctt taatcacttg ttttactaaa cgtaaaattg aaggattgta tggttgatac 60
 aagtaagaaa cagctcaga catacgcata gcagccattg tatattgaat caaatcattt 120

gtaccaatac taaagaaatc aacttcttta gcaaatacat ctgctaaagc agcagttgat 180
 ggtatctcta ccataatacc taattcaata tcgtcagata cttcaatgcc ttcgtttggt 240
 aaattctctt tttcttccaa taataatgct tttgcatctc gaaactcttt aattgtggca 300
 accattggga acatgatatt taatttaccg taagtagacg cacgtaacaa tgctcttaat 360
 tgtggtctga aaatatcagg ttgatctaag cataaacgaa ttgcacgata tcccaagaac 420
 ggatcatttt tcgtaa 436

<210> 130
 <211> 454
 <212> DNA
 <213> *Klebsiella pneumoniae*

<220>
 <221> misc_feature
 <222> (444)..(444)
 <223> n is a, c, g, or t

<400> 130
 ccgcacatgc cagtccattt accttcagcg tgagaagcat caataacttg cttaatcaga 60
 ttcagtacag acggtgacat cggctggtaa agatgtgaaa tcatatcatt accacgggtca 120
 actgccagag tatattgcgt taaatcattg gtgcgatac taaagaaatc aacttctttg 180
 gccagatgac gagcaatagt cgccgcagcc ggtgtttcca ccatcacgcc gatctcaatg 240
 gattcgtcaa atgctttacc ttcgtcacgc agttcctggt tgtagatttc gatctctttc 300
 ttcagcgcac gcacttcttc aacagagatg atcatcgga acataatgcg cagcttaccg 360
 aaagcggagg cgcgaggat ggcgcgaacc tggtcgcgca ggatctcttt acgatccatc 420
 gcaatagca cggcacgcca gccnaagaac ggat 454

<210> 131
 <211> 454
 <212> DNA
 <213> *Salmonella typhimurium*

<220>
 <221> misc_feature
 <222> (444)..(444)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (446)..(446)
 <223> n is a, c, g, or t

<400> 131
 ccgcacatgc cagtccattt accttctgca tgagaagcat caataacttg cttgatcaag 60
 ttcagtacgg acggtgacat tggctggtaa aggtgtgaaa tcatatcatt accacggtca 120
 actgccaggg tgtactgcgt taaatcattg gtgccgatac taaagaaatc aacttctttg 180
 gctaaatgac ggcgaattgt cgccgcagcc ggtgtttcca ccatcacgcc aatctcaatg 240
 ctttcgtcaa atgctttacc ttcgtcacgc agttcctggt tgtagatttc aatctctttg 300
 cgcagcgcgc gaacttcttc aacagagatg atcatcgggg acataatgcg caatttaccg 360
 aaagcggagg cacgcagaat cgcgcggaacc tggtcacgca ggatctcttt gcgatccatg 420
 gcgatacgca cggcgcgcca gccnangaac ggat 454

<210> 132
 <211> 476
 <212> DNA
 <213> Escherichia coli

<400> 132
 cctgccattt caccgcacat gccagtccat ttgccttcag catgagaagc atcaataact 60
 tgcttgatca agttcagcac ggacggtgac attggctggt aaaggtgtga aatcatatca 120
 ttaccacggt caactgccag agtgtactgc gttaaatacat tggtgccgat actaaagaaa 180
 tcaacttctt tggctaaatg acgtgcaatt gttgcggcag ccggtgtttc caccattacg 240
 ccgacttcaa ttgactcgtc aaacgcttta ccttcgtcgc gcagttcctg tttgtagatt 300
 togatctctt tgcgcagtgc acgcacttct tcaacagaga tgatcatcgg gaacataatg 360
 cgcaatttac cgaaagccga ggcacgcagg atagcgcgga gctgatcgcg caggatctct 420
 ttacgatcca ttgcgatacg gatagcgcgc cagccaaaga acgggttcat ttctta 476

<210> 133
 <211> 476
 <212> DNA
 <213> Escherichia coli

<400> 133
 tcctgccatt tctccgcaca tgccagtcca tttgccttca gcatgagaag catcaataac 60
 ttgcttgatc aagttcagca cggacggtga cattggctgg taaaggtgtg aatcatatc 120
 attaccacgg tcaactgccg gagtgtactg cgtaaataca ttggtgccga tactaaagaa 180
 atcaacttct ttggctaaat gacgtgcgat tgttgcggca gccggtgttt ccaccattac 240
 gccgatttca attgactcgt caaacgcttt accttcgtcg cgcagttcct gttttagat 300

ttcgatctct ttgcgcagtg cacgcacttc ttcaacagag atgatcatcg ggaacataat	360
gcgcaattta ccgaaagccg aggcacgcag gatagcgcgg agctgatcgc gcaggatctc	420
tctacgatcc atcgcgatac ggatagcgcg ccagcccaag aacggattca tttctt	476

<210> 134
 <211> 476
 <212> DNA
 <213> *Citrobacter freundii*

<400> 134	
tcccgccatt tctccgcaca tgccagtcca ttgacctca gcatgagaag catcaataac	60
ttgcttgatc agcgtcagca cagatggcga catcggttgg taaaggtgtg aaatcatatc	120
attaccacgg tcaactgccg ggggtgtactg cgttaaatca ttggtgccga tactaaagaa	180
atcaacttct ttggctaaat gacgcgcaat tgttgccgca gccggtgttt ccaccatcac	240
gccaatctca atgctctcgt caaatgcttt accttcgtcg cgcagttcct gttttagat	300
ttcaatctct ttgcgcagtg cacgcacttc ttcaacagag atgatcattg ggaacataat	360
gcgcagttta ccgaaagcag aggcgcgcag aatcgcgcga acctggtcac gcaggatctc	420
tttacgatcc atggcgatac gcacggcacg tcagcccagg aatgggttca tctctt	476

<210> 135
 <211> 476
 <212> DNA
 <213> *Pseudomonas putida*

<400> 135	
tcccgccatt tctccgcaca tgctcactgg cttgccttca ccatgggcat cgcgcaccac	60
cgtgctcaag gcttgcagct ccgcccgggtg caggtagtcg tacaggtcgg caaccgcgg	120
gttggttgcgg tccaccgccg gcaggacttg ggtcaggtcg ttggagccga ccgacaggaa	180
atccacctgc cgcgccagtt ccttgggtctg gtacaccgcc gcaggatatt ccaccatcac	240
gcccaccggc ggcacggcga catcggtgcc ttcgtcacgc acctcgcccc aggcgcgggtg	300
gatcagggtgc agcgttctt ccagctcgtg gatgccgga atcatcggca gcaggatgcg	360
caggttgttc aggcctcgc tggccttgag catggcgcga gtctgcacca ggaagatttc	420
cgggtggtcg agggtgacgc ggatgccgcg ccagcctaag aatggattca tctcgt	476

<210> 136
 <211> 476
 <212> DNA

<213> *Shigella sonnei*

<400> 136

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ccggccattt caccacacat gccagtcatt ttgccttcag catgagaagc atcaataact      60
tgcttgatca agttcagcac ggacggtgac attggctggt aaagggtgtga aatcatatca    120
ttaccacggt caactgccag agtgtactgc gttaaattcat tggtgccgat actaaagaaa    180
tcaacttctt tggctaaatg acgtgcaatt gttgcggcag ccggtgtttc caccattacg    240
ccgatttcaa ttgactcgtc aaacgcttta ccttcgtcgc gcagttcctg tttgtagatt    300
tcgatctctt tgcgcagtg cgcactttct tcaacagaga tgatcatcgg gaacataatg    360
cgcaatttac cgaaagccga ggcacgcagg atagcgcgga gctgatcgcg caggatctct    420
ttacgatcca tcgcgatacg gatagcgcgc cagcccagga acggattcat ctctta      476
```

<210> 137

<211> 476

<212> DNA

<213> *Listeria innocua*

<400> 137

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tcctgccatt tctccgcaca taccagtcca tttgccctct ttatgagaag catcaattac      60
catttttact aagcgtaaaa tagatggatt gtatggttgg taaaggtaag aaacgcgttc    120
attcatacgg tcagcagcca ttgtatactg aatcaagtca tttgttccga ttgagaagaa    180
atcaacttct tttgcaaatt gatcagctaa aactgcagca gcaggaattt caatcataat    240
tccaagttcg atggaatcag atacttctgt tccagcagct tttagtttcg ctttttcac    300
tagtaaaata tcgcgcgctt ggcggaattc atttactggt gcaatcatcg ggaacataat    360
ttttaagtta ccatatacac ttgcgcgaag tagagcgcga agttgtgtac ggaataattc    420
ttcattcgca aaacaaagac gaatgcacg gaatcctaag aacgggttca tttcgt      476
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<210> 138

<211> 455

<212> DNA

<213> *Serratia marcescens*

<220>

<221> misc_feature

<222> (5)..(6)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (9)..(9)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (17)..(17)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (20)..(20)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (25)..(25)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (434)..(434)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (450)..(450)

<223> n is a, c, g, or t

<400> 138

ttctnngang gactctntcn taaanagcat caataacctg tttgatcagg ccaagcactg 60

atggggacat cggggttatag agatgagaaa tcagctcggt gccgcgatct accgccagag 120

tatactgggt tagatcggtt gtcccaatac taaagaagtc gacttctttc gccagggtgt 180

gagcgatgac cgccgcagcc ggtgtttcca ccatcacgcc cacttcgatg ctctcgtaa 240

acgccttgcc ttcttcgcgc agctgcgcct tcagcgtctc gatttcgcct ttcagatcgc 300

gcacttcttc cacggagatg atcatcgga acatgatgcg cagtttaccg aacgccgagg 360

cgcgaggat ggcgcgagc tgggcgtgca ggatttcacg gcggtccatc gcgatgcgga 420

tggcgcgcca gccnaagaac ggattcattn totta 455

<210> 139

<211> 454

<212> DNA

<213> Salmonella enterica hadar

<220>

<221> misc_feature

<222> (444)..(444)

<223> n is a, c, g, or t

<400> 139

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ccgcacatgc cagtccatTT accttctgca tgagaagcat caataacttg cttgatcaag      60
ttcagtacgg acggtgacat tggctggtaa aggtgtgaaa tcatatcatt accacgggtca    120
actgccaggg tgtactgcgt taaatcattg gtgccgatac taaagaaatc aacttctttg     180
gotaaatgac gcgcaattgt cgccgcagcc ggtgtttcca ccatcacgcc aatctcaatg     240
ctttcgtcaa atgctttacc ttcgtcacgc agttcctggt tgtagatttc aatctctttg     300
cgcagcgcgc gaacttcttc aacagagatg atcatcggga acataatgcg caatttaccg     360
aaagcggagg cacgcagaat cgcgcggaacc tggtcacgca ggatctcttt gcgatccatg    420
gcgatacgca cggcgcgcca gccnaagaac ggat                                     454

```

```

<210> 140
<211> 454
<212> DNA
<213> Salmonella enteritidis

```

```

<220>
<221> misc_feature
<222> (444)..(444)
<223> n is a, c, g, or t

```

```

<400> 140
ccgcacatgc cagtccatTT accttctgca tgagaagcat caataacttg cttgatcaag      60
ttcagtacgg acggtgacat tggctggtaa aggtgtgaaa tcatatcatt accacgggtca    120
actgccaggg tgtactgcgt taaatcattg gtgccgatac taaagaaatc aacttctttg     180
gctaaatgac gcgcaattgt cgccgcagcc ggtgtttcca ccatcacgcc aatctcaatg     240
ctttcgtcaa atgctttacc ttcgtcacgc agttcctggt tgtagatttc aatctctttg     300
cgcagcgcgc gaacttcttc aacagagatg atcatcggga acataatgcg caatttaccg     360
aaagcggagg cacgcagaat cgcgcggaacc tggtcacgca ggatctcttt gcgatccatg    420
gcgatacgca cggcgcgcca gccnaagaac ggat                                     454

```

```

<210> 141
<211> 454
<212> DNA
<213> Salmonella enterica Brandenburg

```

```

<220>
<221> misc_feature
<222> (444)..(444)
<223> n is a, c, g, or t

```

```

<400> 141
ccgcacatgc cagtccatTT accttctgca tgagaagcat caataacttg cttgatcaag      60
ttcagtacgg acggtgacat tggctggtaa aggtgtgaaa tcatatcatt accacgggtca    120
actgccaggg tgtactgCGT taaatcattg gtgccgatac taaagaaatc aacttctttg      180
gctaaatgac gcgcaattgt cgccgcagcc ggtgtttcca ccatcacgcc aatctcaatg      240
ctttcgtcaa atgctttacc ttCGTcacgc agttcctggt tgtagatttc aatctctttg      300
cgcagcgCGc gaacttcttc aacagagatg atcatcgga acataatgcg caatttaccg      360
aaagcggagg cacgcagaat cgcgcgaacc tggtcacgca ggatctcttt gcgatccatg      420
gcgatacgca cggcgcgcca gccnaagaac ggat                                         454

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<210> 142
<211> 454
<212> DNA
<213> Salmonella enterica derby

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<220>
<221> misc_feature
<222> (444)..(444)
<223> n is a, c, g, or t

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```

<400> 142
ccgcacatgc cagtccatTT accttctgca tgagaagcat caataacttg cttgatcaag      60
ttcagtacgg acggtgacat tggctggtaa aggtgtgaaa tcatatcatt accacgggtca    120
actgccaggg tgtactgCGT taaatcattg gtgccgatac taaagaaatc aacttctttg      180
gctaaatgac gcgcaattgt cgccgcagcc ggtgtttcca ccatcacgcc aatctcaatg      240
ctttcgtcaa atgctttacc ttCGTcacgc agttcctggt tgtagatttc aatctctttg      300
cgcagcgCGc gaacttcttc aacagagatg atcatcgga acataatgcg caatttaccg      360
aaagcggagg cacgcagaat cgcgcgaacc tggtcacgca ggatctcttt gcgatccatg      420
gcgatacgca cggcgcgcca gccnaagaac ggat                                         454

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```

<210> 143
<211> 454
<212> DNA
<213> Salmonella enterica virchow

```

```

<220>
<221> misc_feature
<222> (444)..(444)
<223> n is a, c, g, or t

```



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<400> 143
ccgcacatgc cagtccattt accttctgca tgagaagcat caataacttg cttgatcaag      60
ttcagtacgg acggtgacat tggctggtaa aggtgtgaaa tcatatcatt accacgggtca    120
actgccaggg tgtactgcgt taaatcattg gtgccgatac taaagaaatc aacttctttg      180
gctaaatgac gcgcaattgt cgccgcagcc ggtgtttcca ccatcacgcc aatctcaatg      240
ctttcgtcaa atgctttacc ttcgtcacgc agttcctggt tgtagatttc aatctctttg      300
cgcagcgcgc gaacttcttc aacagagatg atcatcgga acataatgcg caatttaccg      360
aaagcggagg cacgcagaat cgcgcgaacc tggtcacgca ggatctcttt gcgatccatg      420
gcgatacgca cggcgcgcca gccnaagaac ggat                                         454

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```

<210> 144
<211> 454
<212> DNA
<213> Salmonella enterica paratyphi B

```

```

<220>
<221> misc_feature
<222> (444)..(444)
<223> n is a, c, g, or t

```

```

<400> 144
ccgcacatgc cagtccattt accttctgca tgagaagcat caataacttg cttgatcaag      60
ttcagtacgg acggtgacat tggctggtaa aggtgtgaaa tcatatcatt accacgggtca    120
actgccaggg tgtactgcgt taaatcattg gtgccgatac taaagaaatc aacttctttg      180
gctaaatgac gcgcaattgt cgccgcagcc ggtgtttcca ccatcacgcc aatctcaatg      240
ctttcgtcaa atgctttacc ttcgtcacgc agttcctggt tgtagatttc aatctctttg      300
cgcagcgcgc gaacttcttc aacagagatg atcatcgga acataatgcg caatttaccg      360
aaagcggagg cacgcagaat cgcgcgaacc tggtcacgca ggatctcttt gcgatccatg      420
gcgatacgca cggcgcgcca gccnaagaac ggat                                         454

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```

<210> 145
<211> 458
<212> DNA
<213> Streptococcus thermophilus

```

```

<400> 145
ccgctcatac cagcccattt accttcagcg tgagctgcct taataacggt gttaatcaag      60
cgaaggattg atgggttata tggttggtaa aggtatgaaa cttgttcatt catacgggtca    120

```

gcagccattg tgtattggat aaggctggtt gtaccaattg agaagaaatc aacttcttta 180
gcaaattggt cagcaagcat tgctgcagct gggatttcaa tcatgatacc tacttcgatg 240
tcgtttgcaa cggcaacacc ttcagcaacc aatttagctt tttcttcttc aagaatacct 300
ttagcagtac ggaactcagt caacaaagca accattggga acatgatacg caatttaccg 360
tgaacagatg cacgaagcaa ggcacgtaat tgagtacgga acatttggtt accagtttca 420
gagatagaaa tacgtaatgc acggttaacc aagaacgg 458

<210> 146
<211> 455
<212> DNA
<213> Streptococcus suis

<220>
<221> misc_feature
<222> (450)..(450)
<223> n is a, c, g, or t

<400> 146
gccacatac cagcccattt accttctgcg tgtgcagcct tgataacatt gttaatcaag 60
cgaaggattg atgggttata tggttggtag aggtatgaaa cttgttcatt catacgggtct 120
gcagccattg tgtactggat aaggctggtt gtaccgattg agaagaagtc aacttctttg 180
gcaaattggt ctgcaagcat tgctgctgca gggatttcaa tcatgatacc aacttggata 240
tcatccgcaa ctgctacacc ttcagccaac aagtttgctt tttcttcatc aaggattgct 300
tttgctgcac ggaattcagt caacaaggca accattggga acatgatacg aagtttacca 360
tgtactgatg aacgaagaag ggcacgcaac tgagtgcgga acatttggtt accagtttca 420
gagatagaga tacgaagggc acggaaacn aagaa 455

<210> 147
<211> 449
<212> DNA
<213> Bacillus pseudomyces

<400> 147
ccgcacatac cagcccattt tccttcttta tgagcagcat cgataacat ttttacaagg 60
cgtaaaatag atggattata cggttggtat aagtaagata cacgttcatt catacgggtct 120
gcagccattg tgtattggat taggtcggtt gttccgatag agaagaaatc aacttctttt 180
gcaaactgat ctgctaatac tgcagaagcg ggaatttcta ccatcatacc tacctcaata 240

gcacagaaa cagttgtacc agcttgaaca agtctttctt tctcttctaa taaaattgct 300
 ttgcttgac ggaattcatc aagagttgca atcattggga acataatttt taaattacca 360
 tatacgcttg cacgaagcaa tgcacgaagt tgtgtacgga acacatcttg ttcttcaagg 420
 cataagcgaa tcgcacggta acccaagaa 449

<210> 148
 <211> 450
 <212> DNA
 <213> Staphylococcus lugdunensis

<220>
 <221> misc_feature
 <222> (445)..(445)
 <223> n is a, c, g, or t

<400> 148
 ccgcacatac cagtccattt accttcttta tgagaagctt caatcacttg tttcactaga 60
 cgtaaaatag ctggattata tggttgataa aggtatgata cacgttctga catgcggtca 120
 gcagccattg tgtattgaat caaatcatta gtaccgatac tgaagaaatc aacttcttta 180
 gcaaagatat cagctaatgc agctgttgat gggatttcta ccattattcc gagctcgata 240
 tcattctgaca cgtcatgtcc ttcatTTTTT agatttctt tttcttctaa aagaagcgct 300
 ttggcatctc taaactcatt aatagtagca accattggga acataatatt taatttttcc 360
 atatgctgaa gcacgcaaaa gagcgcgcaa ctgtggtctg aaaatatcag gttgatctaa 420
 gcacaatcga atcgcacggt aaccnaagaa 450

<210> 149
 <211> 590
 <212> DNA
 <213> Cryptococcus neoformans

<400> 149
 cgacagttat gaccgacccg gatcttctgt gatggatttg agtaagagca tatatgctgg 60
 gacccgaaaag atggtgaact atgcctgaat agggcgaagc caggggaaac tctggtggag 120
 gctcgtagcg attctgacgt gcaaatcgat cgtcgaattt gggatatagg gcgaaagact 180
 aatcgaacca tctagtagct ggttcctgcc gaagtttccc tcaggatagc agaaactcgc 240
 atcagtttta tgaggtaaag cgaatgatta gaggccttg ggcgaaacg tccttaacct 300
 attctcaaac tttaaagtgt taagaagcac ttgtcactta attggacgag cgcattcgaa 360
 tgagagtttc tagtgggcca tttttggtaa gcagaactgg cgatgcggga tgaaccgatc 420

gcgagggttaa ggtgccggaa tacacgctca tcagacacca caaaaggtgt tagttcatct 480
agacagcagg acggtggcca tggaagtcgg aatccgctaa ggagtgtgta acaactcacc 540
tgccgaatga actagccctg aaaatggatg gcgctcaagc gtgttaccca 590

<210> 150
<211> 480
<212> DNA
<213> Streptococcus thermophilus

<220>
<221> misc_feature
<222> (4)..(4)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (22)..(22)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (28)..(28)
<223> n is a, c, g, or t

<400> 150
ttgnaacggc ttatgctgta gnacaagnac accgaagggg caagggataa gacccgaaac 60
tctcaggttaa aaggacagaa agcattgaat gtttttaact ttcagtaata gctttgtact 120
ttcagaggtc tggttaagcc aaacctcttt ttgatgtctc ggtctaagga gattttaaac 180
gcatgttaga ctttttcact tccattgatg actttgtatg gggacctccc cttcttgtcc 240
ttcttgtagg aactgggtatc taccttaciaa tccgtcttgg acttttgcaa atcattcgtc 300
tgccataaagc ctttaaactt atctttgctg aagataaagg agaggggtgat atttctagtt 360
ttgcagccct tgccacagca cttgctgcaa ctggttggtac tggtaacatt gttggtgttg 420
cgacagccat taagactggg gggcctgggt ctcttttctg gatgtggatt gctgctttct 480

<210> 151
<211> 457
<212> DNA
<213> Enterococcus villorum

<400> 151
ccgaaggggc aagggataag acccgaaact ctcaggtaaa aggacagaaa gcattgaatg 60
tttttaactt tcagtaatag ctttgtactt tcagagggtct ggttaagcca aacctctttt 120

tgatgtctcg gtctaaggag attttaaacg catgttagac tttttcactt ccattgatga	180
ctttgtatgg ggacctcccc ttcttgtcct tctttagga actggtatct accttacaat	240
ccgtcttggga cttttgcaaa tcattcgtct gcctaaagcc tttaaactta tctttgctga	300
agataaagga gagggtgata tttctagttt tgcagccctt gccacagcac ttgctgcaac	360
tgttggtact ggtaacattg ttggtgttgc gacagccatt aagactggtg ggccctggtgc	420
tcttttctgg atgtggattg ctgctttctt tggaatg	457

<210> 152
 <211> 498
 <212> DNA
 <213> Streptococcus pyogenes

<220>
 <221> misc_feature
 <222> (4)..(4)
 <223> n is a, c, g, or t

<400> 152	
ttanaggcgc cgaggggcaa ggcatactgc tcaatctctc aggcaaaagg acagaaggta	60
aaatacaaac accattaaga acagtcttag tcttttttgt gtttgctggt ttatcattgc	120
ttcagaagtt gtctcaaaga aagagatagc ttttttcttt tggcgtcttc gatgactttt	180
aggagagaaa gatgatagca ctcggttaat taattgataa ccttgtttgg ggaccgcccc	240
tcttaatttt attggttggg acggggattt accttaccag tcatttagga ttaattcaaa	300
tcttaaaact accaagagcc tttaaactca ttttttcaga tgacgaagga catggagata	360
tttcatcctt tgctgctctt gcaactgccc ttgccgctac tgtcggaact ggtaacattg	420
ttggggttgc cactgctatc aagtctggtg gtccctggagc gctcttttgg atgtgggttg	480
ccgctttttt tggaatgg	498

<210> 153
 <211> 476
 <212> DNA
 <213> Streptococcus mutans

<400> 153	
gcgccgaggg gcaaggctgt ttgctcaaac tctcaggcaa aaggacagaa aagaaaaaaa	60
gaatttttaa tgttgaaaca attcttatct tctaactcta gaggtatcgt caagtattga	120
caacctcttt tttagatttc atttcggttt atgaggagaa aagtttatat gttaacattt	180
tttaaagctc tagacagctt tgtctggggg gttcccctat tagttctttt agtcggtact	240

ggaatttatt tgagtactcg cttaagatta ttgcaggtat tgaaactccc tttagccttt 300
aaactcatct ttgccgagga caaaggggaa ggtgatattt cgagttttgc ggcttttagct 360
actgctcttg ctgccactgt tggaactgga aatatcgttg gtgttgccac tgcaatcaaa 420
gctggcggtc cgggagcact cttttggatg tggatagcag ctttttttg aatggc 476

<210> 154
<211> 576
<212> DNA
<213> Streptococcus agalactiae

<220>
<221> misc_feature
<222> (31)..(31)
<223> n is a, c, g, or t

<400> 154
aagtagcaac atctttgtat tgacaccaag natgtgctct aggcgccgaa ggggcaagaa 60
gagtaaaaca actcctcaa tctctcaggc aaaaggacag aagctaaaag ccaatattaa 120
taatgagtag taagcttatt aagtttacta ctacctttat ttgtgcgctt tttagctagc 180
atctttcaga agttatctct tttagagata acttttttcg tttcattaca gaatccatag 240
gtatgtcatg tatcaaagga gaacatatgc taacactttt tactcatatc aatagcttcg 300
tttgggggcc acctttactt gctttattag tcggaacagg tatttaccta tcatttcgct 360
taggttttgt tcaattgaga caactttcta gagctttcaa attgattttc cgagaagata 420
acggacaagg ggatatttca agttatgctg ctcttgcaac tgctcttgct gcaacggtag 480
ggacaggtaa tatcgttggg gtggctacgg ctattaaatc tggaggacca ggagctttgt 540
tttggatgtg ggtagccgcc ttttttgga tggccc 576

<210> 155
<211> 440
<212> DNA
<213> Streptococcus sanguis

<220>
<221> misc_feature
<222> (237)..(237)
<223> n is a, c, g, or t

<400> 155
tagaaccgct caaactctca ggtaaaagga cagagcgaag aggcagggat ttccctactc 60

cagcacatcc aggagtacat gttttgcatg tgctctttct ttttctcggg gtgaaaagga 120
gcttatatca tgttggaat attgaatcgt ctggattctt ttgtttgggg tccgcccctg 180
ctcattttgc tggttggtac tggatatctat ctcagtctgc gtctgggctt gctgcanatt 240
tttcgacttc ctctgacctt tcggctaatac tttgtatcgg acgaggagca tcagggcgat 300
gtctctagct ttgcggctct ctgtacggct ctagccgcga ctgtgggaac gggaaatatac 360
atcggagtgg caactgccat taaaaccggg ggaccggggg cgctcttctg gatgtgggtg 420
gctgctttct ttggaatggc 440

<210> 156
<211> 450
<212> DNA
<213> Streptococcus oralis

<400> 156
gggcaaggca ggtaactgct caaactctca ggtaaaagga cagagctagg atagaccgct 60
ttttggcatt tatctaagca ttccagagta catgtatctt gcatgtactc tttcttttgg 120
ggttgaaaga taggagaagg acatgttaga attgcttaaa gcgcttgatg cttttgcttg 180
ggggcctccc ctcttgatct tattggtcgg aacgggtatc tatttgacca tccgactggg 240
ccttttgcag gttactcgtc tccctaaggc ctttcagttg atctttacca aggacaaggg 300
gcacggcgat gtgtcgagct ttgctgctct ctgtacggct ctagcagcca cagttgggtac 360
gggaaatatac atcggggtag cgacagccat taaggttgga ggaccagggg ccctcttttg 420
gatgtggatg gcggccttct ttggaatggc 450

<210> 157
<211> 498
<212> DNA
<213> Streptococcus suis

<220>
<221> misc_feature
<222> (12)..(12)
<223> n is a, c, g, or t

<400> 157
ttttggcccg angggcaagg tagtcctgct tggaaaagta gagctactga aactctcagg 60
taaaaggaca gagcggtgaa aaataggctt tttctgtatt ttccacgttg attctagagg 120
ttgaagtgtt cagcctcttt ttgtttttcc ggcagcttta tcggggttaga aacgcttagg 180
aggaactatg ttagaactat ttaaggctat caacaatctt gtttggggac cgccccctctt 240

gttactattg gtcggaacgg gtgtctatTT taccctacgg ttgggagtat ttcagattgg 300
 caaattgccg acggcTTTT gtctgattTT ctccagtac cagtctggtc agggagatgt 360
 gtccagtttt gcggctctgt gtacggcttt agcagcgaca gttggtacag gaaatatcgt 420
 cggagttgcg acagctatta ctacaggtgg tcctggggct cttttctgga tgtgggttgc 480
 ggcctTTTTT ggaatggc 498

<210> 158
 <211> 469
 <212> DNA
 <213> *Staphylococcus simulans*

<400> 158
 atccggcttt gagtttaaag ctattgatgc ttttaattacg aacttccatc tgccgaagtc 60
 cacacttgtc atgttagttt cagcattcag ttcaaaacaa tatattttta atgcatacca 120
 aacagctgtc gaaatgaaat atcgattctt cagctttggg gatgcaatgt taattattta 180
 agggagtcgt gaaaaagtta tgccctgcagt aacttatgaa catatcaaaa catgtaaaca 240
 atccggtgca aggttaggaa tcgtgcatac accgcacggg tcgtttgaaa cacctatggt 300
 tatgccagta ggaactcaag ctaccgttaa aactatgagt cctgaagaac taagggaat 360
 taatgcacaa atcatttttag gcaacacata ccatttatgg ttgcaaccgg gcaatgacat 420
 tattaacgc gcgggtgggt tgcataaatt tatgatttgg aatggccac 469

<210> 159
 <211> 467
 <212> DNA
 <213> *Enterococcus faecalis*

<400> 159
 gtaaaggcac cgaaggggca aggcaggtaa ctgctcaaac tctcaggtaa aaggacagag 60
 ctaggataga ccgctTTTT gcatTTatct aagcattcca gagtacatgt atcttgcattg 120
 tactctttct tttgggggtg aaagatagga gaaggacatg ttagaattgc ttaaagcgct 180
 tgatgctttt gcttgggggc ctccctctt gatcttattg gtcggaacgg gtatctatTT 240
 gaccatccga ctgggccttt tgcaggttac tcgtctccct aaggcctttc agttgatctt 300
 taccaaggac aaggggcacg gcgatgtgtc gagctttgct gctctctgta cggtctagc 360
 agccacagtt ggtacgggaa atatcatcgg ggtagcgaca gccattaagg ttggaggacc 420
 aggggccctc ttttggtatg ggatggcggc cttctttgga atggccc 467

<210> 160
 <211> 468
 <212> DNA
 <213> *Streptococcus pneumoniae*

<400> 160
 gtaaaggcac cgaaggggca aggcaggcaa ctgctcaaac tctcaggtaa aaggacagag 60
 ctaggataga ccgcttttta gcatttatct aagcattcca gagtacatgt atcttgcattg 120
 tgctctttct tttgggggttg aaacgatagg agaaggaaat gttagaattg cttaaataca 180
 tcgatgcttt tgcttgggga ccgccccctt tgattttatt ggtcgggaaca gggatttacc 240
 taaccatgcg gctaggactc ttgcagggtt tgcgctctgcc caaggccttt cagcttattt 300
 ttatccagga taaggacat ggtgatgtat ccagttttac agctctgtgt acagccttgg 360
 catcaactgt tggaacagga aatatcatag gagttgcgac ggctatcaag gttgggtggac 420
 caggagctct attttggatg tggatggcgg ttttctttgg aatggccc 468

<210> 161
 <211> 463
 <212> DNA
 <213> *Enterococcus durans*

<220>
 <221> misc_feature
 <222> (1)..(1)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (3)..(3)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (21)..(21)
 <223> n is a, c, g, or t

<400> 161
 ngnccgaggg gcaaggtcag nacaactgct caaactctca ggtaaaagga cagagctagg 60
 atagaccgct ttttagcatt tatctaagca ttccagagta catgtatctt gcatgtgctc 120
 tttcttttgg ggttgaaacg ataggagaag gaaatgtag aattgcttaa atcaatcgat 180
 gcttttgctt ggggaccgcc cctcttgatt ttattggctg gaacagggat ttacctaacc 240
 atgcggctag gactcttgca ggttttgcgt ctgccaagg cctttcagct tatttttatc 300
 caggataagg gacatggtga tgtatccagt ttacagctc tgtgtacagc cttggcatca 360

actgttgga caggaaatat cataggagtt gcgacggcta tcaagggttg tggaccagga 420
gdtctatattt ggatgtggat ggcggttttc tttggaatgg ccc 463

<210> 162
<211> 517
<212> DNA
<213> Bacillus anthracis

<220>
<221> misc_feature
<222> (1)..(1)
<223> n is a, c, g, or t

<400> 162
ngaggaaaac gagcaccgaa ggagcaaata cgctactata gcggataata tctcaggtaa 60
aaggacagag acaagcgaaa gaaaatgccg atttgtatcg gtttattttt ctatcccttg 120
tttctccaga gaccatttca tttacttgaa gtggttttta ttttttctaa aaaaggagaa 180
taaagatgga gacagtaagt aaagtattag aacaaatcaa tcactatgtg tggggattac 240
caacgttatt gttactcgtt ggtactggta ttattctcac agtgcgttta aaagggttac 300
agtttagtaa actattatac gctcacaac tagcttttaa aaaatcagaa gatacatctt 360
cctctggaga tattagccac ttccaagcgc ttatgacagc tatggcgcca acgattggta 420
tgggaaatat agctggtggt gcaactgctg tgacgatcgg tggacctggt gcaatctttt 480
ggatgtggat tactgctttg tttggaatgg cccaaaa 517

<210> 163
<211> 539
<212> DNA
<213> Bacillus anthracis Sterne

<220>
<221> misc_feature
<222> (2)..(2)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (4)..(4)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (22)..(22)
<223> n is a, c, g, or t

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<400> 163
tncncgcttt aaatagcgta gnaggcaaaa cgagcaccga aggagcaaat ccgctactat      60
agcggataat ctctcaggta aaaggacaga gacaagcgaa agaaaatgcc gatttgtatc      120
ggttttatfff tctatccctt gtttctccag agaccatttc atttacttga agtggttttt      180
atftttttcta aaaaaggaga ataaagatgg agacagtaag taaagtatta gaacaaatca      240
atcactatgt gtgggggatta ccaacgttat tggtactcgt tgggtactggg attattctca      300
cagtgcgttt aaaagggttta cagtttagta aactattata cgctcacaaa ctagctttta      360
aaaaatcaga agatacatct tcctctggag atattagcca cttccaagcg cttatgacag      420
ctatggcggc aacgattggg atgggaaata tagctggtgt tgcaactgct gtgacgatcg      480
gtggacctgg tgcaatcttt tggatgtgga ttactgcttt gtttggaatg gcccaaaaa      539

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<210> 164
<211> 539
<212> DNA
<213> Bacillus anthracis Butare

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<220>
<221> misc_feature
<222> (1)..(2)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (4)..(4)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (6)..(6)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (11)..(11)
<223> n is a, c, g, or t

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<400> 164
nncncncgct ntaaatagcg tagaggcaaa acgagcaccg aaggagcaaa tccgctacta      60
tagcggataa tctctcagggt aaaaggacag agacaagcga aagaaaatgc cgatttgtat      120
cggtttatfff ttctatccct tgtttctcca gagaccattt catttacttg aagtggtttt      180
tattttttct aaaaaggag aataaagatg gagacagtaa gtaaagtatt agaacaaatc      240
aatcactatg tgtgggggatt accaacgtta ttgttactcg ttgggtactgg tattattctc      300

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acagtgcggtt taaaagggttt acagtttagt aaactattat acgctcacia actagctttt 360
 aaaaaatcag aagatacatc ttcctctgga gatattagcc acttccaagc gcttatgaca 420
 gctatggcgg caacgattgg tatgggaaat atagctggtg ttgcaactgc tgtgacgatc 480
 ggtggacctg gtgcaatctt ttggatgtgg attactgctt tgtttggaat ggcccaaaa 539

<210> 165
 <211> 538
 <212> DNA
 <213> Bacillus anthracis

<220>
 <221> misc_feature
 <222> (2)..(2)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (4)..(4)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (12)..(12)
 <223> n is a, c, g, or t

<400> 165
 tntntcgctt tnatagcgta gtaggcaaaa cgagcaccga aggagcaaat ccgctactat 60
 agcggataat ctctcaggta aaaggacaga gacaagcgaa agaaaatgcc gatttgtatc 120
 ggttttatatt tctatccctt gtttctccag agaccatttc atttacttga agtggttttt 180
 attttttcta aaaaaggaga ataaagatgg agacagtaag taaagtatta gaacaaatca 240
 atcactatgt gtggggatta ccaacgttat tggtactcgt tgggtactggt attattctca 300
 cagtgcggtt aaaagggtta cagtttagta aactattata cgctcaciaa ctagctttta 360
 aaaaatcaga agatacatct tctctggag atattagcca cttccaagcg cttatgacag 420
 ctatggcggc aacgattggt atgggaaata tagctggtgt tgcaactgct gtgacgatcg 480
 gtggacctgg tgcaatcttt tggatgtgga ttactgcttt gtttggaatg gcccaaaa 538

<210> 166
 <211> 541
 <212> DNA
 <213> Bacillus anthracis Coda-Cerva

<220>
 <221> misc_feature
 <222> (3)..(3)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (5)..(5)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (7)..(7)
 <223> n is a, c, g, or t

<400> 166
 cntnncncgc tttaaatagc gtagaggcaa aacgagcacc gaaggagcaa atccgctact 60
 atagcggata atctctcagg taaaaggaca gagacaagcg aaagaaaatg ccgatttgta 120
 tcggtttatt tttctatccc ttgtttctcc agagaccatt tcatttactt gaagtggttt 180
 ttattttttc taaaaaagga gaataaagat ggagacagta agtaaagtat tagaacaat 240
 caatcactat gtgtggggat taccaacgtt attgttactc gttggtactg gtattattct 300
 cacagtgcgt ttaaaagggt tacagtttag taaactatta tacgctcaca aactagcttt 360
 taaaaaatca gaagatacat cttcctctgg agatattagc cacttccaag cgcttatgac 420
 agctatggcg gcaacgattg gtatgggaaa tatagctggg gttgcaactg ctgtgacgat 480
 cgggtggacct ggtgcaatct tttggatgtg gattactgct ttgtttggaa tggcccaaaa 540
 a 541

<210> 167
 <211> 537
 <212> DNA
 <213> Bacillus anthracis

<220>
 <221> misc_feature
 <222> (2)..(2)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (4)..(4)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (11)..(11)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (533)..(533)
 <223> n is a, c, g, or t

 <400> 167
 tncncgcttt naatagcgtg gaggcaaaac gagcaccgaa ggagcaaadc cgctactata 60
 gcggataatc tctcaggtaa aaggacagag acaagcgaaa gaaaatgccg atttgtatcg 120
 gtattatttt ctatcccttg tttctccaga gaccatttca ttacttgaa gtgggtttta 180
 ttttttctaa aaaaggagaa taaagatgga gacagtaagt aaagtattag aacaaatcaa 240
 tcactatgtg tggggattac caacgttatt gttactcggt ggtactggta ttattctcac 300
 agtgcgttta aaagggtttac agtttagtaa actattatac gtcacaaaac tagcttttaa 360
 aaaatcagaa gatacatctt cctctggaga tattagccac ttccaagcgc ttatgacagc 420
 tatggcggca acgattggta tgggaaatat agctgggtgt gcaactgctg tgacgatcgg 480
 tggacctggt gcaatctttt ggatgtggat tactgctttg tttggaatgg ccnaaaa 537

<210> 168
 <211> 531
 <212> DNA
 <213> Bacillus cereus

<400> 168
 tgcttgctag agcgcggagg aaaacgagca ccgaaggagc aaatccgcta ctttagcgga 60
 taatctctca ggtaaaagga cagagacaag cgaaagaaaa agccgattgt atcggtttat 120
 ttttctatcc cttgtttctc cagagaccat ttcatttact tgaagtgggt tttatttttt 180
 ctaaaaaagg agaataaaga tggagacagt aagtaaagta ttagaacaac tgaatcaata 240
 cgtgtgggga ttaccaactt tgttgctact cgttggaaca ggtatcattc tcacagtgcg 300
 tttaaaaggt ttacagttta gtaaaactatt atacgctcac aaactagcat ttaaaaaatc 360
 agaagatgcc tcttcttctg gagatattag tcacttccaa gcacttatga cagctatggc 420
 cgcaacgatt ggtatgggaa atatagccgg tgttgcaaca gctgttacia ttggtgggtcc 480
 tggtgcaata ttttgatgtt ggattaccgc tttatttggg atggcccaaa a 531

<210> 169
 <211> 527
 <212> DNA
 <213> Bacillus cereus

<400> 169

tagcagtcgc ggcggaaaaa cgagcaccga aggagcaa	at ccgctacttt agcggataat	60
ctctcaggta aaaggacaga gacaagcgaa agaaaaagcc	gattgtatcg gtttattttt	120
ctatcccttg tttctccaga gaccatttca tttacttgaa	gtgggtttta ttttttctaa	180
aaaaggagaa taaagatgga gacagtaagt aaagtattag	aacaactaaa tcaatacgtg	240
tggggattac caactttggt gctactcggt ggaacaggta	tcattctcac agtgcgtttg	300
aaaggtttac agtttagtaa actattatac gctcacaac	tagcgtttta aaaatcagaa	360
gatacttctt cttctggaga tatttagtcac ttccaagcac	tcatgacagc tatggccgca	420
acgattggta tgggtaatat agccggtgtt gcaacagcgg	ttacaattgg tggtcctggt	480
gcaatatttt ggatgtggat taccgcttta tttggaatgg	cccaaaa	527

<210> 170
 <211> 519
 <212> DNA
 <213> *Bacillus thuringiensis* serovar *israelensis*

<400> 170		
tatagcgcag aggaaaacga gcaccgaagg agcaa	atccg ctactatagc ggataatctc	60
tcaggtaaaa ggacagagac aagcgaaaga aaatg	ccgat ttgtatcgggt ttatttttct	120
atcccttggt tctccagaga ccatttcatt tactt	gaagt ggtttttatt tttttctaaa	180
aaaggagaat acagatggag acagtaagta aagt	gttaga acaaatacat cactatgtgt	240
ggggactacc aacgttggtg ttactcggtg gtact	ggtat cattctcaca gtgcggttaa	300
aaggtttaca gtttagtaaa ctattatacg ctca	aaact agcttttaaa aaatcagaag	360
atacatcttc ttctggagat attagccact tcca	agcgt tatgacagct atggcggcaa	420
cgattgggtat gggaaatata gctgggtgtg ca	acagctgt gacaatcgggt ggtcccgggtg	480
caatcttttg gatgtggatt actgctttgt ttg	gaatgg	519

<210> 171
 <211> 522
 <212> DNA
 <213> *Bacillus myco?es* serovar

<400> 171		
gtggaggaaa gagagcaccg aaggagcaaa tccg	tagct agtatagcgg ataatctctc	60
aggtaaaagg acagagacaa gcgaaagaaa atg	ccgattt ggatcggttt atttttctat	120
cacttgtttc tccagagacc atttcatttt gtga	agtggt tttttatttt ttctaaaaag	180
gagaataaag atggagacag taagtaaagt acta	gaacaa atcaatcatt acgtatgggg	240

attaccaacc ttgttcctac tcgttggAAC tggaatcatt cttacagtgc gtctaaaagg 300
 ttacagttt agtaaaactat tatacgctca caaactagct tttaaaaaat cagaagacac 360
 atcttctact ggagatatta gtcattttca agcacttatg accgctatgg cagcaacaat 420
 tggaatggga aatatagctg gtgtcgcaac cgctgttaca attggtgggc ccggtgcaat 480
 attttgatg tggattaccg ccctgtttgg aatggcccaa aa 522

<210> 172
 <211> 530
 <212> DNA
 <213> Bacillus myco?es serovar

<220>
 <221> misc_feature
 <222> (458)..(458)
 <223> n is a, c, g, or t

<400> 172
 cgcttctata gcgcggagga aaacgagcac cgaaggagca aatccgctaa tctagcggat 60
 aatctctcag gtaaaaggac agagacaagc gaaagaaaat gccgatttgt atcggtttat 120
 ttttctatcc cttgtttctc cagagaccat ttcatttcct tgaagtgggt tttatTTTT 180
 ctaaaaaagg agaatacaga tggagacagt aagtaaagta ttagaacaaa ttaatcagta 240
 tgtgtggggg ttgccaactt tattgctact cgttggaact ggtatcattc tcacagtgcg 300
 cttaaaagggt ttacagttta gtaaaactaat atacgctcac aaacttgctt ttaaaaaatc 360
 agaggatata tcatcttctg gagatattag tcacttccaa gcactgatga cggctatggc 420
 tgcaacgatt ggtatgggaa atatagcagg tgtcgcanct gctgtgacga tcggtggacc 480
 cggtgcgata ttctggatgt ggattaccgc gttgttttga atggcccaaa 530

<210> 173
 <211> 515
 <212> DNA
 <213> Bacillus thuringiensis serovar Kurstaki

<400> 173
 gaggaacag agcaccgaag gagcaaatcc gcttatatta gcggataatc tctcaggtaa 60
 aaggacagag acaagcgaaa gaaaacgccg atttgtatcg gtttattttt ctattccttg 120
 tttctccaga gaccatttca tttatgtgaa gtgggtttttt attttttcta aaaggagaat 180
 aaagatggag acagtaagta aagtattaga acaaatcaat cactacgtat ggggattacc 240

gaccttattc cttctaatacg gaactggaat cattctcaca gtgcgcctaa aaggtttaca 300
gtttagtaga ctattatacg ctacaaaact agcatttcga aaatcagaag acacatcttc 360
tttgggagat attagtcatt tccaagcact catgacagca atggccgcaa ctattgggat 420
gggaaatata gccggtgtcg caacagctgt tacaatcggg gggccagggg caatattttg 480
gatgtggatc actgccttgt ttggaatggc ccaaa 515

<210> 174
<211> 533
<212> DNA
<213> Enterococcus faecium

<400> 174
gacggaattc tggagagacc ttattaggcg ccgaaggggc aaggcatact gctcaatctc 60
tcaggcaaaa ggacagaagg tagaatacaa acaccattaa gaacagtctt agtctttttt 120
gtgtttgctg ttttatcatt gcttcagaag ttgtctcaaa gaaagagata gcttttttct 180
tttggcgtct tcgatgactt ttaggagaga aagatgatag cactcgtaa attaattgat 240
aaccttgttt ggggaccgcc cctcttaatt ttattggttg ggacggggat ttaccttacc 300
agtcatttag gattaattca aatcttaaaa ctaccaagag cctttaaact cattttttca 360
gatgacgaag gacatggaga tatttcatcc tttgctgctc ttgcaactgc ccttgccgct 420
actgtcggaa ctggtaacat tggtgggggt gccactgcta tcaagtctgg tagtcctgga 480
gcgctctttt ggatgtgggt tgccgctttt tttggaatgg caacaaaata cgc 533

<210> 175
<211> 536
<212> DNA
<213> Enterococcus casseliflavus

<220>
<221> misc_feature
<222> (2)..(2)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (70)..(70)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (76)..(76)
<223> n is a, c, g, or t

<400> 175
 gnaccggaat tctgagagac cttattaggg cgccggaagg ggcaaggcat actgctcaat 60
 ctctcaggcn aaaggncaga aggtaaaata caaacacccat taagaacagt cttagtcttt 120
 tttgtgtttg ctgttttatc attgcttcag aagttgtctc aaagaaagag atagcttttt 180
 tcttttggcg tcttcgatga cttttaggag agaaagatga tagcactcgt taaattaatt 240
 gataaccttg tttggggacc gcccctctta attttattgg ttgggacggg gatttacctt 300
 accagtcatt taggattaat tcaaactctta aaactaccaa gagcctttta actcattttt 360
 tcagatgacg aaggacatgg agatatctca tcctttgctg ctcttgcaac tgcccttgcc 420
 gctactgtcg gaactggtaa cattgttggg gttgccactg ctatcaagtc tgggtggcct 480
 ggagcgctct tttggatgtg ggttgccgct ttttttgaa tggccacaaa atacgc 536

<210> 176
 <211> 508
 <212> DNA
 <213> Enterococcus flavescens

<400> 176
 aggcgcgaa ggggcaaggc atactgctca atctctcagg caaaaggaca gaaggtaaaa 60
 taaaaacacc attaagaaca gtcttagtct tttttgtgtt tgctgtttta tcattgcttc 120
 agaagtgtc tcaaagaaag agatagcttt tttcttttgg cgtcttcgat gacttttagg 180
 agagaaagat gatagcactc gttaaattaa ttgataacct tgtttgggga ccgcccctct 240
 taattttatt gggtgggacg gggatttacc ttaccagtca tttaggatta attcaaactc 300
 taaaactacc aagagccttt aaactcattt tttcagatga cgaaggacat ggagatatct 360
 catcctttgc tgctcttgca actgcccttg ccgctactgt cggaactggg aacattgttg 420
 gggttgccac tgctatcaag tctggtggtc ctggagcgct cttttggatg tgggttgccg 480
 ctttttttgg tatggccaca aaatacgc 508

<210> 177
 <211> 498
 <212> DNA
 <213> Enterococcus gallinarum

<400> 177
 gaacggaatt ctggagagac cgtaaaggca ccgaaggggc aaggcaggta actgctcaaa 60
 ctctcaggta aaaggacaga gctaggatag accgcttttt ggcatttatc taagcattcc 120
 agagtacatg tatcttgcac gtactctttc ttttgggggt gaaagatagg agaaggacat 180

gttagaattg cttaaagcgc ttgatgcttt tgcttggggg cctcccctct tgatcttatt 240
 ggtcggaacg ggtatctatt tgaccatccg actgggcctt ttgcagggtta ctcgctctccc 300
 taaggccttt cagttgatct ttaccaagga caaggggcac ggcgatgtgt cgagctttgc 360
 tgctctctgt acggctctag cagccacagt tggtagcgga aatatcatcg gggtagcgac 420
 agccattaag gttggaggac caggggccct cttttggatg tggatggcgg cttcttttgg 480
 aatggcaact aaatacgc 498

<210> 178
 <211> 497
 <212> DNA
 <213> *Enterococcus raffinosus*

<400> 178
 gacggaattc tggagagacc gttaaaggcac cgaaggggca aggcaggtaa ctgctcaaac 60
 tctcaggtaa aaggacagag ctaggataga ccgctttttg gcatttatct aagcattcca 120
 gagtacatgt atcttgcatt tactctttct tttgggggtg aaagatagga gaaggacatg 180
 ttagaattgc ttaaagcgct tgatgctttt gcttgggggc cccccctctt gatcttattg 240
 gtcggaacgg gtatctatct gaccatccga ctgggccttt tgcagggttac tcgtctccct 300
 aaggcctttc agttgatctt taccaaggac aaggggcacg gcgatgtgtc gagctttgct 360
 gctctctgta cggctctagc agccacagtt ggtacgggaa atatcatcgg ggtagcgaca 420
 gccattaagg ttggaggacc aggggccctc ttttggatgt ggatggcggc cttcttttga 480
 atggccacca aatacgc 497

<210> 179
 <211> 480
 <212> DNA
 <213> *Streptococcus mitis*

<220>
 <221> misc_feature
 <222> (3)..(3)
 <223> n is a, c, g, or t

<400> 179
 atnttaaggc acccaagggc aaggtcaggc aactgctcaa actctcagggt aaaaggacag 60
 agctaggata gaccgctttt tagcatttat ctaagcattc cagagtacat gtatcttgca 120
 tgtgctcttt cttttggggg tgaaaagata ggagaaggaa atgttagaat tgcttaaadc 180
 aattgatgct tttgcttggg gtccaccctt cttgattcta ttggtcggga cagggattta 240

cctaactgct cgtctaggcc tcttgcaggt tttgcgtttg cctaaggcct ttcagcttat	300
ttttactaag gacaaggggc atggcgatgt atccagcttt gcggccttgt gtacagccct	360
agcagcgaca gttggtacgg gaaatattat cggggtggcg acggctatca aggtcgggtg	420
cccaggagcc ctcttttggg tgtggatggc cgctttcttt ggaatggccc aaaataccgc	480

<210> 180
 <211> 598
 <212> DNA
 <213> Streptococcus canis

<220>
 <221> misc_feature
 <222> (1)..(1)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (6)..(6)
 <223> n is a, c, g, or t

<400> 180	
ntagtncttt ttaatgacac tagtgacctt tcgttagtat gtttttaagg actgagtatt	60
gtaatactaa catgaaagaa ctagacaggc gccgaagggg caaggctaga cacacagcta	120
gctcaaactc tcaggcaaaa ggacagaaga taagaatcga ttaacaggta aggtgtatta	180
tctttgtcag tctttctatc acttttcagg agttatcact acgataactc cttttttcta	240
ttctaactgt catcatagga cgctatgttt tattaggaga cttattcgta tatgctaaac	300
ttttttacaa tgctagatga tatgggtctgg ggtgccccac tgcttattct gttggtggga	360
acagggattt atttaactgt tcggcttggc ttactccagg ttttaaaatt acctaaagcc	420
tttaaattaa ttttcgcaga cgataaaggc caaggggata tttctagttt tgccgctctt	480
gctactgctc ttgcagcaac agtaggtact ggtaacatcg ttggtgtagc aacagctatc	540
aaagctggtg gtccctggagc cctattttgg atgtggattg ctgctttctt tggaatgg	598

<210> 181
 <211> 1680
 <212> DNA
 <213> Listeria monocytogenes

<400> 181	
gttagaaaaa ggaagttcta ttgtagcatc gccaaaaatc catcaaacct tattagataa	60
ctacctgcct taaagaaagc gctcaacata aaaaaacttg ttttcagaaa ataaaaatcg	120

tgccaaatcg gctcagctat gctataatag gtaagttgat ttaaacgaga cgatagcgac	180
ggaggaaaaat aaatctatct tctctcttct tttggctaata cttcacgata aatgtttgga	240
tttttaattt aggaggaaac aagattgaat ttaagaaatg atattcgtaa tgtagcaatt	300
attgcccacg ttgaccatgg taaaacaact ctagtagacc aattattacg ccagtcaggc	360
acattccgcg acaatgaaac agttgcagaa cgcgcaatgg acaacaatga tttagaaaga	420
gaacgcggta ttacaatctt agcgaaaaat acagcgatta agtatgaaga tacacgtgta	480
aacatcatgg atacacctgg acacgccgat ttcgggtggag aagtagaacg tatcatgaaa	540
atggttgatg gtgttctttt agtagtggac gcgtatgaag gtacgatgcc tcaaacacgt	600
tttgtactaa aaaaagcact agaacaaaac ctaactccaa tcgtagtagt aaacaaaatt	660
gaccgtgact ttgctcgccc agaagaagtt gttgatgaag tattagaatt attcatcgaa	720
ctaggcgcaa acgacgatca attagaattc ccagttgttt atgcttctgc aatcaacgga	780
acttcaagct atgattccga tccagcagaa caaaaagaaa caatgaaacc acttttagac	840
acaattatcg aacatatccc ggctccagtt gataatagcg acgaaccatt acaattccaa	900
gtatcattac ttgattataa tgactatggt ggtcgtatcg gtattggccg cgtattccgt	960
ggaacaatgc acgtgggaca aacagttgct ttaattaaac ttgatggcac agtaaaacaa	1020
ttccgtgtaa cgaaaatggt cggtttcttc ggactaaaac gtgacgaaat taaagaagca	1080
aaagctggtg atttagtagc attagcaggt atggaagaca tcttcggttg tgaaacagta	1140
acaccatttg accaccaaga agcacttccg ttattacgta ttgatgagcc aaccttgcaa	1200
atgactttcg taacaaataa cagtcctttc gctggtcgtg aaggtaaaca cgtaacaagc	1260
cgtaaaattg aagaacgttt acttgcagag cttcaaacgg acgtatcttt acgcgtagag	1320
ccaacagctt cccctgacgc ttgggtagtt tctggtcgtg gtgagcttca tttatccatt	1380
ttgatcgaaa caatgcgtcg cgaaggttat gaattacaag tttctaaacc agaagtaatc	1440
atccgtgaaa ttgatggcgt gaaatgtgaa ccagtagaag atgttcaaata tgatactcca	1500
gaagaattca tgggttccgt tattgaatct atcagccaac gtaaaggcga aatgaaaaac	1560
atgattaacg atggcaacgg acaagttcgt ttacaattca tggttccagc tcgtggctta	1620
atcggttata caactgattt cctttcaatg actcgtggtt atggtattat caaccacaca	1680

<210> 182
 <211> 1620
 <212> DNA

<213> *Listeria innocua*

<400> 182

ataaaaaaac tcattttcag aaaataaaaa tagtgctaaa tccgcttagc tatgctataa	60
taggtaagtt gatttaaacg agacgatagc gacggaggaa aataaatcta ttttcctctt	120
tcttttggt aatcttcacg ataaatgttt ggatttttaa tttaggagga aacaagattg	180
aatttaagaa acgatattcg taatgtagca attattgccc acgttgacca tggtaaaact	240
acactagtag accaattact acgccaatca ggtactttcc gcgacaatga aacagttgca	300
gaacgtgcaa tggacaacaa tgatttagaa agagaacgcg gtattacaat ttttagcgaaa	360
aatacagcaa ttaagtatga agatacacgc gtaaacaatca tggatacacc tggacacgcc	420
gattttggtg gagaagtaga acgtatcatg aaaatggttg atggtgttct tttagtagtg	480
gacgcgtatg aagggtactat gcctcaaaca cgttttgtac taaaaaagc actagaacaa	540
aacctaactc caatcgtagt agtaaacaaa attgaccgtg actttgctcg cccagaagaa	600
gttggtgatg aagtactaga attattcatc gaactaggtg cgaacgacga tcaattagaa	660
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<210> 183
 <211> 1380
 <212> DNA
 <213> *Bacillus cereus*

<400> 183
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 aacaacactt gttgaccagt tattacgtca agcggggact ttccgtgcga acgaacacgt 240
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 gaaaaatata gcgattcact atgaagataa aagaattaac atttttagata cacctgggtca 360
 cgctgacttc ggtggagaag tagaacgtat catgaaaatg gttgatgggtg ttttacttgt 420
 tgttgatgca tatgaagggt gtatgccaca aacacgattt gttttaaaga aagctcttga 480
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<210> 184
 <211> 1680
 <212> DNA

<213> *Bacillus anthracis*

<400> 184

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gtcaagcggg gactttccgt gcgaacgaac acgttgaaga acgcgcaatg gattcaaatg	240
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aagggtgtct agtttcactt gaaacaggaa aagcatcaca atacggtatt atgcaagttg	1620

aagaccgtgg tgtaatcttc gttgaaccag gtacagaagt atatgctggt atgattgttg 1680

<210> 185

<211> 1270

<212> DNA

<213> Staphylococcus aureus

<400> 185

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<210> 186

<211> 1320

<212> DNA

<213> *Staphylococcus epidermidis*

<400> 186

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ggaacgcgta tcaatatatt agacacacct ggccacgccc attttggtgg tgaagttgaa      360
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gctgtgaatg gaacagcaag tttagactct gaaaagcaag acgaaaatat gcaatcccta      660
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tctattctta ttgaaaacat gagacgtgaa ggctttgaat tacaggtttc taaacctcaa     1260
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<210> 187

<211> 1320

<212> DNA

<213> *Bacillus subtilis*

<400> 187

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taggagatga aaaagtgaaa cttcgaaatg atcttcgcaa catcgcgatt attgcccacg      120
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<210> 188
 <211> 1560
 <212> DNA
 <213> Streptococcus mutans

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<210> 189

<211> 1259

<212> DNA

<213> Streptococcus pneumoniae

<400> 189

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<210> 190

<211> 1860

<212> DNA

<213> Streptococcus agalactiae

<400> 190

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<210> 191
 <211> 1500
 <212> DNA
 <213> Streptococcus pyogenes

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ctaacttaag aaacgatata cgtaacgtag cgattattgc ccacgttgac cacggaaaaa	300
caacacttgt agatgaatta ttaaaacaat cccatactct tgatgagcgt aaagagcttc	360
aagagcgtgc catggattcc aatgaccttg aaaaagaacg tgggattaca atccttgcg	420
aaaatacggc agtagcctat aacgatgttc gtattaacat catggatacc ccaggacacg	480
cggacttcgg tgggtgaagtt gaacgtatca tgaaaatggg tgacgggggtt gttcttggtg	540
tggatgccta cgaaggaaca atgccccaga cgcgtttcgt attgaaaaaa gcacttgagc	600
aaaaccttat cccgatcgtt gtgggtgaaca agattgacaa accttcagct cgtccagcag	660
aagttgtaga tgaagtgcct gaattattca tcgaacttgg tgccgatgat gagcaattgg	720
aattcccagt tgtttacgca tcagctatta atggaacatc atcattatca gatgaccctg	780
ctgaccaaga gcatactatg gcaccgatct ttgatacgat tattgatcat attccagcgc	840
cagttgataa ttcagatgag cctttgcaat tccaagtgtc acttttgac tacaacgatt	900
tcgtaggtcg tatcggatc ggtcgtgttt tccgtggtac tggttaaagtg ggtgaccaag	960
taactctttc aaaacttgat ggtaccacta aaaacttccg tggtacaaaa ctgtttggtt	1020
tcttcggttt ggaacgtcgt gaaattcaag aagctaaagc aggtgacttg attgctgttt	1080
caggtatgga agatatcttt gttggagaaa ccattacacc aactgactgt gtggaagctc	1140
tgccaattct tcgtattgat gagccaacac ttcagatgac tttcttggtc aataactctc	1200
cttttgcagg tcgtgaaggt aaatggatca cgtcacgtaa ggttgaagaa cgtcttttag	1260
cagaattgca aacagacgtg tcacttcgtg ttgacccaac agattcgcca gataaatgga	1320
cggtttcagg gcgtggagaa ttgcatttat ctatcctcat tgaaaccatg cgccgtgaag	1380
gctatgaact tcaagtatca cgtccagaag ttatcatcaa agaaattgat ggtgtcaa	1440
gtgaaccgtt tgagcgtgtt caaattgata caccagaaga atatcagggt gcaatcatcc	1500

<210> 192
 <211> 1740
 <212> DNA
 <213> Enterococcus faecalis

<400> 192	
catcacgcaa cggaaatcgg acaagcaagc atgggcgtgc gtattagcgg ttgtgcaggt	60
ttggaaatta ttgctatggt aaaaggcaac catcatggct atttatctaa tctaagtcct	120

tgggattatg cagcaggctt agtacttttg gaagaatttg ggtttaaata ctctgggtatt	180
acaggaaaac cattaacttt tgcggggtcgt gaatacttta ttgcagcaac tcctgaaacc	240
tatgatgaag tatttaccg atatttaa ataatcggaat aatcaaagaa gagcggtgct	300
gaaaggtaag gctcttctc ttttaaaga gaaaaatttg taaaaaatg tccttgtttt	360
cagaaaaagc cgaataattt ctaaaacttt cattatTTTT gcaggcgaaa gcctTTTTTT	420
aatgaaaaaa gtttgctata ataagcagtc ggcttttatg gacttaagta acataagcgt	480
atatagataa ggagcaatta aattgaaata cagagatgat attcgtaacg tggcaattat	540
cgccacggtt gaccatggta aaacaacctt agtagatgaa cttttaaaac aatctgacac	600
tttagatgga cacacacaat tacaagaacg tgcaatggat tccaatgcac ttgaaagtga	660
acgtggaatt actatcttag caaaaaatac agccgtagat tataacggta cacgtatcaa	720
cattctagat acaccaggac acgcggactt cgggtggtgaa gtagaacgta tcatgaaaat	780
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cgtattgaaa aaagcattag aacaaaaagt aacaccaatc gtggttggtta acaaaattga	900
caaaccttct gctcgtctg aacacgtagt agatgaagtt ttagagttat tcatcgaatt	960
agggtgcagac gacgatcaat tagatttccc agttgtttat gcttctgctt taaacggaac	1020
ttcaagtgaa tcagatgatc cagcagatca agagccaaca atggcccca tttttgataa	1080
aattattgaa catgtgccag ctccagttga caattcagac gaaccacttc aattccaagt	1140
ctcattacta gactacaacg attacgttg acgtattggg attggccgtg tgttccgtgg	1200
cacaatgaaa gtcggcgacc aagttgcgtt gatgaaatta gatggcagcg tgaaaaattt	1260
ccgtgtaacg aaaatttttag gtttcttttg cttacaacgt gtggaaattg atgaagcaaa	1320
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agatgttcac aatcaagaag cattaccaat tctacacatt gatgagccaa cttacaaat	1440
gactttctta gttacaatt ctccatttgc gggacgtgaa ggaaaatata tcaccgctcg	1500
taaaatcgaa gaacgtttaa tggctgagtt acaaacagac gtatctttac gtgttgatcc	1560
aattggccca gattcttgga ctgtatcagg tcgtggcgaa ttgcatttat caattttaat	1620
tgaaaacatg cgtcgtgaag gctatgaatt acaagtttct cgtccagaag ttattgaacg	1680
tgaaattgat ggagttaa atgtgaaccatt tgaacgtgtt caaattgaca cacctgaaga	1740

<210> 193

<211> 1620
 <212> DNA
 <213> *Lactococcus lactis*

<400> 193
 cgaaaaagca agttaaatat gttgtaaata atggtgttac attagataat actagtgggtg 60
 ggcctaattt ggctgcacct gtgacggtgg atagtcaggt aatttcgaac gataaaggta 120
 cgattatggg tgtaaggacc tatacagcag atttaagcca agcagaagta gttaaaaaag 180
 tgggtaattt gaatgcaatg tcctttggag aattttgggg taaaaaagtt tttgctgcc 240
 gccaaaatca gacaaattca gataagactt attctgttac gtttaactg aatataaatt 300
 ggatagtatc taatggctat gcttcgctaa caaaagtaac aggtggctat ggttcttgca 360
 ttgaccatgt ttatgttgct aattctagtgt ttactactgc aacgaatggt cagattaaag 420
 gttcaagtgg ttatactcaa caagttgatg acaaatcaga agggaatagt ttatcgtggt 480
 caattacgcg aaactataaa cctgtaaaag ttccagcaag tggggcaaat gtaggagcta 540
 cgtattttgc cacacttaaa cggggaaata gtacatggaa attccaaaca acaaatagag 600
 cttattaagt gggaggaagt ggaatgaata taaaaggcat aaaaatttgg caagtatttc 660
 ttgcattcat catttgata ggaaccatgt ttcttcctgc aacggtaaat caggctaaat 720
 tgaatacgaa ttttgactat aaaaaaagtc gagaaaattt cttttatttt ctttttcac 780
 aagtcctttt ttatagtttc attttgggat tgggtgttgc tatatcactt tttctcattt 840
 ataggaaaat aaattttagt gtctattttt cttttgctag tcttattttt tacattagtt 900
 tcttagttat agcttttccg tctatgatta tttttaatca tagtttatct gggaatactt 960
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 tatttggttt agttgctttt cttttactct ttctctacag ttttaagaata aaagaatggt 1080
 aacaacataa tcatttttac tgattttatt aattataaaa aaataaagaa ctccttagaa 1140
 atttttcttt ggggttttca ttttggaagt aaaaaaatct ttgttaggct tgtaaacgtg 1200
 tgcatttaca gcttttagaa aagtgtgcta taatgggtta gatataacg aaagtaagg 1260
 atgataaaat tgactaaatt acgcgaagat attagaaacg tcgctgttat tgcccacgtt 1320
 gaccatggta aaactacatt gggtgacgaa ctcttaaac aatctcaaac gttggatgct 1380
 cgtaaagaat tagctgaacg tgcgatggac tcaaatgcac ttgagcaaga acgtgggatt 1440
 actatccttg ccaaaaatac agcagttgaa tataacggaa ctcgatatcaa catcttgac 1500
 acaccaggtc acgcggactt cgggtggagaa gttgaacgta ttatgaaaat gggtgatggg 1560

gttgtcctcg ttgtcgatgc ttatgaagga acaatgcctc aaacacgttt tgttttgaaa 1620

<210> 194
 <211> 468
 <212> DNA
 <213> Neisseria meningitidis groupe B

<220>
 <221> misc_feature
 <222> (4)..(5)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (11)..(11)
 <223> n is a, c, g, or t

<400> 194
 tttnnngcgg ntgttaccta catcgagccg attatgtggc agacggtgga gaagattatc 60
 gccaaagagc ggcccgatgc gattctgccc acgatgggcg gccagaccgc gctgaactgt 120
 gcgctggatt tggcgcgcaa cggcgtgctg gcgaaataca acgtcgagtt aatcggcgcg 180
 acagaagacg cgattgacaa ggcggaagac cgtggccgct ttaaagaagc gatggaaaaa 240
 atcggtttgt cttgcccga atcttttgtc tgccacacga tgaacgaagc cttggcgggc 300
 caagaacagg tcggcttccc gacgctgatt cgtccgtctt tcacgatggg cggttcgggc 360
 ggcggcattg cctacaataa agacgagttt ttggcgattt gcgaacgcgg tttcgatgcg 420
 tcgcccacgc acgagctgct gattgagcag tccgtcctcg gctggaaa 468

<210> 195
 <211> 459
 <212> DNA
 <213> Neisseria meningitidis groupe C

<400> 195
 gttacctaca tcgagccaat tatgtggcag acggtggaga agattatcgc caaggagcgt 60
 cctgatgcga ttctgcccac gatgggaggc cagaccgcgc tgaactgtgc gctggatttg 120
 gcgcgcaacg gcgtgctggc gaaatacaat gtcgagctga tcggcgcgac ggaagacgcg 180
 attgacaagg cggaagaccg cggtcgtttt aaagaagcga tggaaaaaat cggcctctcc 240
 tgcccgaat cttttgtctg ccacacgatg aacgaagctt tggcagcgca agaacaggtc 300
 ggcttcctta ccctgattcg tccgtctttc acgatgggcg gttcgggagg cggcattgcc 360
 tacaataaag atgagttttt ggcgatttgc gaacgcgggt tcgatgcgtc gcctacgcac 420

gagctgctga ttgagcagtc tgttcctcgg ctggaaaga 459

<210> 196
 <211> 458
 <212> DNA
 <213> Enterobacter cloaceae

<400> 196
 gcaacctaca tcgagccaat tcactgggaa gtggtacgta aaatcatcga gaaagagcgt 60
 ccggatgcgg ttctgccgac catgggtggc cagactgcgc tgaactgtgc gctggagctg 120
 gagcgtcagg gcgtgctgga agagttcggc gtgaccatga ttggtgcgac cgccgacgcg 180
 attgataaag cagaagaccg tcgtcgcttc gacgtggcga tgaaaaaat cggcctcgac 240
 accgcgcgtt ccggtatcgc tcacaacatg gaagaggcgc tggccgttgc ggctgaagtg 300
 ggttatccgt gcatcatccg tccttccttc accatgggcg gcaccggcgg cggtatcgcc 360
 tacaaccgcg aagagtttga agagatttgc gagcgcggcc tggatctctc cccaacaaaa 420
 gagctgctga ttgatgaatc gctgattggc tggaaaga 458

<210> 197
 <211> 453
 <212> DNA
 <213> Klebsiella pneumoniae

<400> 197
 ctacatcgag ccgattcact gggaagtggc gcgtaaaatc atcgaaaaag agcgcccgga 60
 tgcggtgctg ccgaccatgg gcggccagac ggcgctgaac tgcgcgctcg agctggagcg 120
 tcaggggggtc ctggctgaat tcggcgtgac catgattggc gccaccgccg atgcgattga 180
 taaagccgaa gaccgtcgcc gtttcgatat cgcaatgaaa aaaatcggcc tcgacaccgc 240
 gcgctctggc atcgcccaca cgatggaaga ggcgctggcg gttgccgccg acgttggttt 300
 cccgtgcate atccgtccgt ccttcacatc gggcggcacc ggcggcggtg tcgcctataa 360
 ccgcgaagag ttcgaagaaa tctgcgaacg cggcctggat ctctctccga ccaacgaact 420
 gctgatcgat gaatcgctga tcggctggaa aga 453

<210> 198
 <211> 458
 <212> DNA
 <213> Shigella sonnei

<400> 198
 gcgacctaca tcgagccgat tcactgggaa gtagtacgca agattattga aaaagagcgc 60

ccggacgcgg tgctgccaac gatgggcggt cagacggcgc tgaactgcgc gctggagctg 120
gagcgtcagg gcgtgttgga agagttcggc gtgactatga ttggtgcgac cgccgatgcg 180
attgataaag cagaagaccg ccgtcggttc gacgtagcga tgaagaaaat tggctctggaa 240
accgcgcggt ccggtatcgc acacacgatg gaagaagcgc tggcggttgc cgctgacgtg 300
ggcttcccggt gcattattcg cccatccttt accatgggcg gtagcggcgg cggtatcgct 360
tataaccgcg aagagtttga agaaatttgc gcccgcggtc tggatctctc cccaaccaaa 420
gagctgctga ttgatgagtc gctgatcggc tggaaaga 458

<210> 199
<211> 458
<212> DNA
<213> Escherichia coli

<400> 199
gcaacctaca tcgagccgat tcaactggaa gttgtacgca agattattga aaaagagcgc 60
ccggacgcgg tgctgccaac gatgggcggt cagacggcgc tgaactgcgc gctggagctg 120
gaacgtcagg gcgtgttgga agagttcggt gtcaccatga ttggtgccac tgccgatgcg 180
attgataaag cagaagaccg ccgtcggttc gacgtagcga tgaagaaaat tggctctggaa 240
accgcgcggt ccggtatcgc acacacgatg gaagaagcgc tggcggttgc cgctgacgtg 300
ggcttcccggt gcattattcg cccatccttt accatgggcg gtagcggcgg cggtatcgct 360
tataaccgtg aagagtttga agaaatttgc gcccgcggtc tggatctctc tccgaccaaa 420
gagttgctga ttgatgagtc gctgatcggc tggaaaga 458

<210> 200
<211> 453
<212> DNA
<213> Pseudomonas aeruginosa

<400> 200
ctacatcgag ccgatcaagt gggccaccgt ggccaagatc atcgagaagg aacgccccga 60
cgcgctgctg ccgaccatgg gcggccagac cgcgctgaac tgcgccctgg acctggagcg 120
ccacggcgtg ctggagaagt tcggcgtgga gatgatcggc gccaatgccg ataccatcga 180
caaggccgag gaccgctcgc gcttcgacaa ggcgatgaag gatatcggcc tggcctgtcc 240
gcgctcgggc atcgcccaca gcatggagga ggcctacggc gtgctcgagc aggtcggctt 300
cccctgcata atccgtccgt ccttcacat gggcggcacc ggcggcggtc tcgcctacaa 360
ccgtgaagag ttogaagaga tctgcgcccc tggcctcgac ctgtcgccga ccaacgagct 420

gttgatcgac gagtcgctga tcggctggaa aga 453

<210> 201
<211> 458
<212> DNA
<213> Escherichia coli

<400> 201
gcgacctaca tcgagccgat tcactgggaa gtggtacgta agattattga aaaagagcgc 60
ccggacgcgg tgctgccaac catgggcggg cagacggcgc tgaactgcgc gctggagctg 120
gaacgtcagg gcgtgttgga agagttcggc gtcacatga ttggtgccac tgccgatgcg 180
attgataaag cagaagaccg ccgtcgtttc gacgtagcga tgaagaaaat tggctctggaa 240
accgcgcgtt ccggtatcgc acatacgatg gaagaagcgc tggcgggttc cgctgacgtg 300
ggcttcccggt gcattattcg cccatccttt accatgggcg gtagcggcgg cggtatcgct 360
tataaccgcg aagagtttga agaaatttgc gcccgcggtc tggatctctc tccgaccaa 420
gagttgctga ttgatgagtc gctgatcggc tggaaaga 458

<210> 202
<211> 454
<212> DNA
<213> Salmonella typhimurium

<400> 202
cctacatcga gccgattcac tgggaagtgg tgcgcaaaat cattgaaaa gagcgtccgg 60
atgcggtgct gccgaccatg ggcggccaga ccgcgctgaa ctgcgcgctg gagctggagc 120
ggcagggcgt gctggaagag ttcggcgtca ccatgattgg tgcgaccgcc gacgccattg 180
ataaagccga agaccgtcgt cgcttcgata tcgcgatgaa gaaaattggg ctgcacaccg 240
cgcgttccgg tategcgcac actatggaag aagcgtggc ggttgccgct gacgtgggct 300
tcccgatcat catccggcct agctttacca tgggcggcac cggcggcggg atcgcttaca 360
accgtgaaga gttcgaagaa atctgcgaac gcggtctgga cctctcgcca accaacgagc 420
tgctgattga tgaatcgctg atcggctgga aaga 454

<210> 203
<211> 461
<212> DNA
<213> Salmonella enterica hadar

<220>

<221> misc_feature
 <222> (7)..(7)
 <223> n is a, c, g, or t

<400> 203
 tgatgcncct acatcgagcc gattcactgg gaagtggtag gcaaaatcat cgaaaaagag 60
 cgtccggatg cgggtgctgcc gaccatgggc ggccagacgg cgctgaactg cgcgctggag 120
 ctggagcggc agggcgtgct ggaagagttc ggcgtcacca tgattggcgc caccgccgac 180
 gccattgata aagccgaaga ccgtcgtcgc ttcgatatcg cgatgaagaa aattggtctc 240
 gacaccgcgc gttccggtat cgcgcacact atggaagaag cgctggcggg tgccgctgac 300
 gtgggcttcc cgtgcatcat ccgtccgtcc ttaccatgg gcggcaccgg cggcggtatc 360
 gcttacaacc gtgaagagtt cgaagaaatc tgcaacgcg gtctggacct ctgcccaacc 420
 aacgagctgc tgattgatga atcgctgac ggctggaaag a 461

<210> 204
 <211> 464
 <212> DNA
 <213> Salmonella enteritidis

<400> 204
 ggctgatgcc cctacatcga gccgattcac tgggaagtgg tacgcaaat catcgaaaaa 60
 gagcgtccgg atgcggtgct gccgaccatg ggcgccaga cggcgctgaa ctgcgcgctg 120
 gagctggagc ggcagggcgt gctggaagag ttcggcgta ccatgattgg cgccaccgcc 180
 gacgccattg ataaagccga agaccgtcgt cgcttcgata tcgcgatgaa gaaaattggt 240
 ctgcacaccg cgcgttccgg tatcgcgcac actatggaag aagcgtggc ggttgccgct 300
 gacgtgggct tccgtgcat catccgtccg tcctttacca tgggcggcac cggcggcggg 360
 atcgcttaca accgtgaaga gttcgaagaa atctgcgaac gcggtctgga cctctcgcca 420
 accaacgagc tgctgattga tgaatcgctg atcggtgga aaga 464

<210> 205
 <211> 452
 <212> DNA
 <213> Salmonella enterica Brandenburg

<400> 205
 tacatcgagc cgattcactg ggaagtggtag cgcaaatca ttgaaaaaga gcgtccggat 60
 gcggtgctgc cgaccatggg cggccagacg gcgctgaact gcgcgctgga gctggagcgg 120
 cagggcgtgc tcgaagagtt cggcgtcacc atgattggcg ccaccgccga cgccattgat 180

aaagccgaag accgtcgtcg cttcgatata gcgatgaaga aaattggtct cgacaccgcg 240
 cggtccggta tcgcgcacac tatggaagaa gcgctggcgg ttgccgctga tgtgggcttc 300
 ccgtgcatca tccgtccgtc ctttaccatg ggcggcaccg gtggcggtat cgcttacaac 360
 cgtgaagagt tcgaagaaat ctgcgaacgc ggtctggacc tctcgccaac caacgagctg 420
 ctgattgatg aatcgctgat cggctggaaa ga 452

<210> 206
 <211> 453
 <212> DNA
 <213> Salmonella enterica derby

<400> 206
 ctacatcgag ccgattcact gggaagtggg gcgcaaaatc atcgaaaaag agcgtccgga 60
 tgcggtgctg ccgaccatgg gcggccagac cgcgctgaac tgcgcgctgg agctggagcg 120
 gcagggcgctg ctggaagagt tcggcgtcac catgattggc gccaccgccg acgccattga 180
 taaagccgaa gaccgtcgtc gcttcgatata cgcgatgaag aaaatcggtc tcgacaccgc 240
 gcgttccggg atcgcgcaca ctatggaaga agcgtggcgg gttgccgctg acgtgggctt 300
 cccgtgcatc atccgtccgt cctttaccat gggcggcacc ggcggcggta tcgcttacia 360
 ccgtgaagag ttcgaagaaa tctgcgaacg cggctctggac ctctcgccaa ccaacgagct 420
 gctgattgat gaatcgctga tcggctggaa aga 453

<210> 207
 <211> 453
 <212> DNA
 <213> Salmonella enterica virchow

<400> 207
 ctacatcgag ccgattcact gggaagtggg gcgcaaaatc attgaaaaag agcgtccgga 60
 tgcagtgctg ccgaccatgg gcggccagac ggcgctgaac tgtgcgctgg agctggagcg 120
 gcagggcgctg ctggaagagt tcggcgtcac catgattggc gccaccgccg acgccattga 180
 taaagccgaa gaccgtcgtc gcttcgatata cgcgatgaag aaaattgggtc tcgacaccgc 240
 gcgttccggg atcgcgcaca ctatggaaga agcgtggcgg gttgccgctg acgtgggctt 300
 cccgtgcatc atccgtccgt cctttaccat gggcggcacc ggcggcggta tcgcttacia 360
 ccgtgaagag ttcgaagaaa tctgcgaacg cggctctggac ctctcgccaa ccaacgagct 420
 gctgattgat gaatcgctga tcggctggaa aga 453

<210> 208
 <211> 453
 <212> DNA
 <213> *Salmonella paratyphi B*

 <400> 208
 ctacatcgag ccgattcact ggggaagtggg gcgcaaaatc attgaaaaag agcgtccgga 60
 tgcagtgctg ccgaccatgg gcggccagac cgcgctgaac tgcgcgctgg agctggagcg 120
 gcagggcgctg ctccaagagt tcggcgctcac catgattggc gccaccgccg acgccattga 180
 taaagccgaa gaccgtcgtc gcttcgatat cgcgatgaag aaaattgggtc tcgacaccgc 240
 gcgttcgggt atcgcgaca ctatggaaga agcgtggcg gttgccgctg acgtgggctt 300
 cccgtgcac atccggccta gctttacat gggcggcacc ggcggcggtc tcgcttaca 360
 ccgtgaagag ttcgaagaaa tctgcgaacg cggctctggac ctctcgcca ccaacgagct 420
 gctgattgat gaatcgctga tcggctggaa aga 453

<210> 209
 <211> 503
 <212> DNA
 <213> *Proteus vulgaris*

 <400> 209
 cgacagtcac gaccgacct gaaatggcgg atgccaccta catcgagcct attcattggc 60
 aagtcgtcag aaaaattatt gaaaaagagc gccctgatgc gattttgcca acaatggggg 120
 ggcaaacggc attaaattgc gcattagaat tagaacgtca aggtgtgtta gctgaattcg 180
 gtgtgaccat gattggtgct acggctgatg ctatcgataa agcagaagat agacaacgct 240
 ttgataaagc aatgaaaaaa atcggcttag gcacagctcg ctcagggtatt gtcataatc 300
 tagaagaagc ttttgccgtc gctgaagatg tcggattccc ttgcatcatt cgtccttcat 360
 ttactatggg cggcacgggg ggcggtatcg cttataaccg tgaagaattt gaagaaattt 420
 gtactcgtgg attagattta tcaccgacta acgagttatt gattgatgaa tcacttattg 480
 gttggaaaga gtacgagatg gaa 503

<210> 210
 <211> 503
 <212> DNA
 <213> *Enterobacter aerogenes*

 <400> 210
 cgacactcat gaccgaccgg gaaatggccg atgcgaccta tatcgagccg attcactggg 60
 aagtgggtgcg taaaattatc gaaaaagagc gtccggacgc ggtgctgccg accatggggc 120

gccagaccgc gctgaactgc gcgctggagc tggagcgtca gggcgtgctg gcagagtctg 180
gcgtgaccat gattggtgcg accgccgatg cgatcgataa agcgggaagac cgccgtcgct 240
tcgacgtggc gatgaagaaa atcgggtctcg acaccgcgcg ttccggcatt gcgcacacca 300
tggaagaagc gctggcggtg gccgctgaag ttggcttccc atgcatcatc cgtccgtcct 360
ttactatggg cggcaccggc ggcggtatcg cctataaccg cgaagagttc gaagaaatct 420
gcgaacgcgg cctggatctc tctccgacca acgaactgct gattgatgaa tcgctgatcg 480
gctggaagga atacgaaatg gaa 503

<210> 211
<211> 453
<212> DNA
<213> Burkholderia cepacia

<400> 211
cgacagtcac gaccgatccg gaccgcgaca tcacagcgac agtgatgcgt gaacgaacta 60
ggctagtga atttatccgg cgccggatac gcgaccgga cgatgccgag gacatcctgc 120
aggatgtgtt tcacgagttc gtacaagcgt atcgacttcc agcgcccatt gaacagggtga 180
gcgcgtggct tttccgtgcc gcgcgcaacc gaatcgtcga ccgttttcgc aagaagaagg 240
agcagccgct ggccgacctg tcggaggtcg acgatgacgc gaacagcgag tatcgccctg 300
acctcgcgct accggcgcat gatgccggcc ccgaagcact ctacgctcgc acgctcgtgc 360
tcaaggcctt gcaggatgcg ctgcagcagc tgccgacgaa tcagcgtgac gtctttatcg 420
cacacgagct ggagggtcag tcataaatgt cga 453

<210> 212
<211> 616
<212> DNA
<213> Burkholderia mallei

<400> 212
ggcgttgctg gaggagggt acaaggatcat cctcgtcaac agcaaccgga cgacgatcat 60
gaccgatccg aacacggcgg acgtcacgta catcgagccg atcacgtggg aagtcgtcga 120
gcgcatcatc gcgaaggagc gccccgacgc gatcctgccc acgatgggag gccagaccgc 180
gctgaactgc gcgctcgacc tgttccacca cggcgtgctc gagaagtacg gcgtcgagct 240
gatcggcgcg tcgccggagg cgatcgacaa ggccgaagac cgccagaagt tcaaggacgc 300
gatgacgaag atcggcctcg gctcggcgaa gtccggcatc gcgcactcga tggaagaggc 360

gctgaaggtg cacgcggaca tcgcggcggc gacgggcggc agcggctacc cggtcgtgat	420
ccgcccgtcg ttcacgctcg gcggctcggg cggcggcatc gcgtacaacc gcgaggagtt	480
cgaggagatc tgcaagcgcg gcctcgatct gtcgccgacg cgcgagctgc tgatcgagga	540
atcgctgctc ggctggaagg agtacgagat ggaggtcgtg cgcgatcgcg ccgacaactg	600
catcatcgtc tgctcg	616

<210> 213
 <211> 616
 <212> DNA
 <213> Burkholderia pseudomallei

<400> 213	
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gaccgatccg aacacggcgg acgtcacgta catcgagccg atcacgtggg aagtcgtcga	120
gcgcatcatc gcgaaggagc gccccgacgc gatcctgccg acgatgggcg gccaaaccgc	180
gctgaactgc gcgctcgacc tgttccacca cggcgtgctc gagaagtacg gcgctcgagct	240
gatcggcgcg tcgccggagg cgatcgacaa ggccgaagac cgccagaagt tcaaggacgc	300
gatgacgaag atcggcctcg gctcggcgaa gtccggcatc gcgcactcga tggaagaggc	360
gctgaaggtg cacgcggaca tcgcggcggc gacgggcggc agcggctacc cggtcgtgat	420
ccgcccgtcg ttcacgctcg gcggctcggg cggcggcatc gcgtacaacc gcgaggagtt	480
cgaggagatc tgcaagcgcg gcctcgatct gtcgccgacg cgcgagctgc tgatcgagga	540
atcgctgctc ggctggaagg agtacgagat ggaggtcgtg cgcgatcgcg ccgacaactg	600
catcatcgtc tgctcg	616

<210> 214
 <211> 502
 <212> DNA
 <213> Legionella pneumophila

<400> 214	
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gacaaacagc cttaaactgc gccttggaact tggttaagaga aggggtatta gccaaagtact	180
ctgttgaaat gataggagcg acgcgtgaag ccatagacag ggcggaagat agagaaaaat	240
ttcgccagct gatgattaaa atcggattgg atatgccaag gtcgacgatt gctcatagcc	300
tggaagaagc aattcaagta caagcccgtt taggctttcc tgccatcatc aggccttcat	360

ttaccatggg tggtagtgga ggcggtattg cctataatcg tgaagaattt gaagaaattt	420
gcattagagg attggagttg tcgccaaactc acgagctttt gattgatgaa tcggttctgg	480
gttggaaaga atatgaaatg ga	502

<210> 215
 <211> 502
 <212> DNA
 <213> *Citrobacter freundii*

<400> 215	
cgacacttat gactgatccg gaaatggccg atgccaccta catcgagccg attcactggg	60
aagtgggtacg caaaatcatt gagaaagagc gcccggtatgc ggtgctgcca accatgggcg	120
gtcagacggc gctgaactgt gcgctggagc tggaaacgcca gggcgtagct gctgaattcg	180
gcgtgaccat gattggcgca acggcggatg ccattgataa agcgggaagac cgtcgtcgct	240
ttgatatcgc gatgaagaaa attgggtctcg acaccgcgcg ctctggcatc gtcacacca	300
tggagaagc gctggcggtt gctgctgacg tgggcttccc gtgcatcatc cgaccgagct	360
tcaccatggg cggcaccggc ggcggtatcg cttataaccg tgaagagttc gaagagattt	420
gtgaacgcgg tctggacctt tccccaacca acgagctgct gattgatgaa tcgctgattg	480
gctggaaaga gtacgaaatg ga	502

<210> 216
 <211> 503
 <212> DNA
 <213> *Acinetobacter baumannii*

<400> 216	
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gagaggctga aaccacgttc acaaattctt aggaattctt cgcggttata tgcaatacca	120
ccgcctgaac caccatagt gaatgacgga cggataatta ctgggaaacc aaagcgagat	180
tgaatttcca atgcttcttc cattgtttca gcaatggcag cttttggaca ttccaagccg	240
attttgcgca ttgcttcac aaacaattta cggctctcag ctttttcaat tgcttctttt	300
gttgcaccaa taagtcttac gccgtatfff tctaatacac cattttcatc aagtgcaagt	360
gcgcagttaa gagcagtttg tccaccata gtagggagta ctgcatctgg gcgctctttt	420
tcaatgattt gagcaacagt ttgccaagta attggctcaa tataagttgc atcagccatt	480
gaagggtcag tcataagtgt cga	503

<210> 217
 <211> 503
 <212> DNA
 <213> *Serratia marcescens*

<400> 217
 cgacagttat gaccgacccg gagatggccg acgcgaccta tattgagccg atccactggg 60
 aagtgggtgcg caagatcatc gaaaaagagc gcccggatgc ggtgctgccg accatgggcg 120
 gccagacggc gctgaactgc gcgctggagc tggagcgcca gggcgtgctg gccgagttcg 180
 gcgttaccat gatcggcgcc accgccgatg cgattgacaa ggccgaagac cgtcgccgct 240
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 tggaagaagc gctggcggtg gccgctgacg tcggcttccc gtgcatcatc cgcccttcc 360
 ttaccatggg cggcaccggc ggcggcatcg cctacaaccg cgaagagttc gaagagatct 420
 gcgaacgcgg tctggacctg tcgccgacca acgagctgct gatcgatgaa tcgctgatcg 480
 gttggaaaga atacgagatg gaa 503

<210> 218
 <211> 610
 <212> DNA
 <213> *Pseudomonas putida*

<400> 218
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 aagcatcctg attctcggtg ccggcccgat cgtgatcggc caggcctgtg aattcgacta 120
 ctccggcgcc caggcctgca aggccctgcg cgaggaaggt ttccgcgtca tcctggtgaa 180
 ctccaaccca gccaccatca tgaccgaccc ggccatggcc gacgccacct acatcgagcc 240
 gatcaagtgg cagtcggtgg ccaagatcat cgagaaagag cgcccggacg ccgttttgcc 300
 gaccatgggt ggccagaccg ccctgaactg cgccctggac ctggagcgcc acggcgttct 360
 ggagaagttt ggcgtagaga tgatcgggtc caacgccgat accatcgaca aggctgaaga 420
 ccgctcgcgc ttcgacaagg ccatgaaaga catcggcctg gaatgcccg cgtcgggtat 480
 cgcccacagc atggaagagg ccaatgcggt cctcgaaaag ctcggttcc cgtgcatcat 540
 tcgcccgtcg ttcaccatgg ggtggcaccg gcggtggtat cgcttacaac cgtgaagaat 600
 tcgaagaaat 610

<210> 219
 <211> 466

<212> DNA
 <213> *Morganella morganii*

<400> 219
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 tgcgctggat ctggaacgtc acggcgtgct ggcagagttc ggcgtcgaaa tgattggcgc 120
 gacagcagat gcgattgata aagccgaaga tcgccgccgt ttcgatatcg cgatgaaaaa 180
 aatcgggtctg gatacagcgc gttccggtat cgcacacacc atggaagaag cgtttgcggt 240
 cgccgatgat gtcggtttcc cgtgcattat ccgcccgta ttcacatgg gcggcaccgg 300
 cggcggtatt gcgtataacc gtgaagaatt cgaggaaatc tgtaccgcg gcctggatct 360
 ctccctgacc aacgaactgc tgattgatga atcactgatt ggctggaaag agtacgaaat 420
 ggaaagggcg aattccagca cactggcggc cgttactagt ggatca 466

<210> 220
 <211> 503
 <212> DNA
 <213> *Klebsiella oxytoca*

<400> 220
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 gccagacggc gctgaactgc gcgctggagc tggagcgtca gggcggtgctg gccgagttcg 180
 gcgtgaccat gattggcgcg accgcgcgac cgattgataa agccgaagac cgccgccgtt 240
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 tggaagaagc gctggcggtt gccgctgaag ttggcttccc gtgcatcatc cgtccgtcct 360
 ttacgatggg cggcaccggc ggcggtatcg cctacaaccg cgaagagttc gaagagatct 420
 gcgaacgcgg tctggatctc tcgccgacca acgagctgct gattgatgaa tcgctgatcg 480
 gctggaaaga atacgaaatg gaa 503

<210> 221
 <211> 502
 <212> DNA
 <213> *Moraxella catarrhalis*

<220>
 <221> misc_feature
 <222> (481)..(481)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (493)..(493)
 <223> n is a, c, g, or t

<400> 221
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 acaaacggca cttaactgtg cgcttgacct tgacaaacat ggcgtgcttg ccaaatatgg 180
 ctgtgagctg attggggcga ccaaagaagc cattgaaaaa gccgaagacc gtgaactggt 240
 tgataaagcc atgaaaaaaaa tcggtctgga atgccccaaa gcagaaattg cacagagcat 300
 ggatgatgct ttgcccattc aagctaaggt tggttttccg tgcattatcc gcccatcatt 360
 caccatgggg ggttctgggg gtggcattgc ttataaccgt gaggagtta ttgagatttg 420
 tgagcgtggg ttgacttat caccacacca ccagctgctc attgatgaga gtttaatcgg 480
 ntggaaagag tangaaatgg aa 502

<210> 222
 <211> 624
 <212> DNA
 <213> Brucella melitensis biovar 1

<400> 222
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 aattcctgac ggttatagcg aatgccgccc cggtgcccgc cgagcgtgaa ggaggggccc 120
 atgatcgccg gcaggccaac cacgtcgagc gcctgtgctg cctttgcaag cgcattggctc 180
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 gccttggtcca gttcgctgcc ggagaattgc gccttcacct ccgcgcgctt gacctcgtgg 300
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 tcggccttgg cgccgatcat ctcgacgtta taacgttcaa gcacgcccac gcggcgcaag 480
 gaaagcgcgg tgttgagcgc ggtctgtccg cccatcgctc gcaggatcgc gtccgggccc 540
 tccttggcga tgatcttggc gacgacttcc ggcgtgatcg gctcgatata gggtgcatcc 600
 gccagatcgg gatcagtata aaat 624

<210> 223
 <211> 618
 <212> DNA

<213> Brucella melitensis biovar 2

<400> 223

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gatgatcgcg ggcaggccaa ccacgtcgag cgcctgtgct gcctttgcaa gcgcatggct      180
catatagcgc tgcttgcgct ccacttcgcc gagctgccat tcggtttcaa gcttgtcgag      240
cgccttgtcc agttcgtcgc cggagaattg cgccttcacc tccgcgcgct tgacctcgtg      300
gcgcttgcgg tcctcatcct tgatttcagt cgcattggcg aacatcgagc ccggcgtgtc      360
gaggccgatc ttcttcatgg cttcgcggaa gagcgcgcgg tcttcggcct tgtcgatagc      420
ttcggccttg gcgccgatca tctcgacggt ataacgttca agcacgcccc tgccggcgcaa      480
ggaaagcgcg gtgttgagcg cggctctgtcc gcccatcgtc ggcaggatcg cgtccggggcg      540
ctccttggcg atgatcttgg cgacgacttc cggcgtgatc ggctcgatat aggttgcac      600
cgccagatcg ggatcagt                                     618
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<210> 224

<211> 617

<212> DNA

<213> Brucella abortus biovar 1

<400> 224

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gaattcctga cggttatagg caatgccgcc gccggtgccg ccgagcgtga aggaggggcg      120
gatgatcgcg ggcaggccaa ccacgtcgag cgcctgtgct gcctttgcaa gcgcatggct      180
catatagcgc tgcttgcgct ccacttcgcc gagctgccat tcggtttcaa gcttgtcgag      240
cgccttgtcc agttcgtcgc cggagaattg cgccttcacc tccgcgcgct tgacctcttg      300
gcgcttgcgg tcctcatcct tgatttcagt cgcattggcg aacatcgagc ccggcgtgtc      360
gaggccgatc ttcttcatgg cttcgcggaa gagcgcgcgg tcttcggcct tgtcgatagc      420
ttcggccttg gcgccgatca tctcgacggt ataacgttca agcacgcccc tgccggcgcaa      480
ggaaagcgcg gtgttgagcg cggctctgtcc gcccatcgtc ggcaggatcg cgtccggggcg      540
ctccttggcg atgatcttgg cgacgacttc cggcgtgatc ggctcgatat aggttgcac      600
cgccagatcg ggatcag                                     617
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<210> 225

<211> 633

<212> DNA

<213> Brucella abortus biovar 2

<400> 225

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gggcggatga tcgcgggcag gcccaaccacg tcgagcgcct gtgctgcctt tgcaagcgca      180
tggctcatat agcgcctgctt gcgctccact tcgccgagct gccattcggg ttcaagcttg      240
tcgagcgcct tgtccagttc gtcgccggag aattgcgcct tcacctccgc gcgcttgacc      300
tcttggcgct tcgcgtcttc atccttgatt tcagtcgcat tggcgaacat cgagcccggc      360
gtgtcgaggc cgatcttctt catggcttcg cggaagagcg cgcggtcttc ggcttgctcg      420
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cgcaaggaaa gcgcggtggt gagcgcggtc tgtccgccca tcgtcggcag gatcgcgtcc      540
gggcgctcct tggcgatgat cttggcgacg acttccggcg tgatcggctc gatatagggt      600
gcatccgccca gatcgggata agtataaatt agt                                     633
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<210> 226

<211> 632

<212> DNA

<213> Brucella suis biovar 1

<220>

<221> misc_feature

<222> (6)..(6)

<223> n is a, c, g, or t

<400> 226

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ggagggggcgg atgatcgcgg gcaggccaac cacgtcgagc gcctgcgctg cctttgcaag      180
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cggcgctgctg aggcgatct tcttcatggc ttcgcggaag agcgcgcggt cttcggcctt      420
gtcgatagct tcggccttgg cgccgatcat ctcgacgtta taacgttcaa gcacgcccatt      480
gcggcgcaag gaaagcgcgg tggtgagcgc ggtctgtccg cccatcgctc gcaggatcgc      540
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gtccggggcgc tccttggcga tgatcttggc gacgacttcc ggcgtgatcg gctcgatata 600
 gggttgcattcc gccagatcgg gatcagtata aa 632

<210> 227
 <211> 635
 <212> DNA
 <213> *Brucella suis* biovar 3

<400> 227
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 agggggcggat gatcgcgggc aggccaacca cgtcgagcgc ctgcgctgcc tttgcaagcg 180
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 ccgggcgctc cttggcgatg atcttggcga cgacttcgcg cgtgatcggc tcgatatagg 600
 ttgcatccgc cagatcggga tcagtataaa ttagt 635

<210> 228
 <211> 624
 <212> DNA
 <213> *Brucella canis*

<400> 228
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tccttggcga tgatcttggc gacgacttcc ggcgtgatcg gctcgatata ggttgcaccc 600
gccagatcgg gatcagtata aaaa 624

<210> 229
<211> 632
<212> DNA
<213> Brucella ovis

<400> 229
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ctcgaagaat tcctgacggt tataggcaat gccgccgccg gtgccgccga gcgtgaagga 120
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tgcatccgcc agatcgggat cagtataaaa tt 632

<210> 230
<211> 482
<212> DNA
<213> Francisella tularensis

<220>
<221> misc_feature
<222> (3)..(3)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (22)..(22)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (480)..(480)
<223> n is a, c, g, or t

<400> 230

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ggacaaactg cgcttaactg tgctttagca ttagacaaag ctggtathtt agaaaaatat      180
aatgtcgaaa tgcttggtgc aaaagctgac tctattgata aggcagaaaa tagagaaaga      240
tttaacaaag ccatggcaaa aattggctta gaggttccta gaaatgttgt agtgcaatcg      300
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tttaccttg gtggtagcgg tggtggtatc gcttatacaa aagaagagtt tgaaaaaatt      420
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at                                                                           482

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<210> 231
<211> 480
<212> DNA
<213> Francisella tularensis

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<220>
<221> misc_feature
<222> (6)..(6)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (469)..(469)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (472)..(472)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (476)..(476)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (479)..(479)
<223> n is a, c, g, or t

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<400> 231
acgaantaga ctgatccaac aaccgcagat aaaatcttta tcgagccaat tacggttgag      60
agtgttggtg aaattatcgc tagagaaaga ccagatgcaa tcttacctac agtaggtgga      120
caaactgcgc ttaactgtgc tttagcatta gacaaagctg gtattttaga aaaatataat      180

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gtcgaaatgc ttggtgcaaa agctgactct attgataagg cagaaaatag agaaaaat	240
aacaaagcca tggcaaaaat tggcttagag gttcctagaa atgttgtagt gcaatcgatg	300
gagcaagctt ataaagctct agaagatata ggactaccgg ctattatcag accatcattt	360
acacttggtg gtagcgggtg tggatatcgt tatacaaaag aagagtttga aaaaattgtc	420
aaaaatggtc taagcctata accaacaat gaagtactaa tagatgagnc ancctnaanc	480

<210> 232
 <211> 503
 <212> DNA
 <213> *Acinetobacter calcoaceticus*

<400> 232	
cgacagttat gactgatcct tcaatggctg atgcaactta tattgagccg attacttggc	60
aaacagttgc acagattatt gaaaaagaac gtccagatgc agtattgcca actatgggtg	120
gtcaaactgc attgaactgt gccctcgcac ttgatgagca cggcgttcct gctaaatata	180
atgttgaatt aattgggtgca agcaaagaag cgattgagaa agccgaagat cgtaaactct	240
tcgatatcgc tatgcgcaaa attggcttgg aatgtccaaa agctgccatt gctgaaacaa	300
tggaagaagc ttttaacaatc cagtcgcgct ttggttttcc tgtaattatt cgtccatcat	360
ttacaatggg tggttcgggc ggtggcattg catataaccg cgaagaattc cttgaaat	420
gtgaacgtgg ttttgacctc tctcctactc accagttatt gatcgatgaa tctttaattg	480
gctggaaaga atacgagatg gaa	503

<210> 233
 <211> 617
 <212> DNA
 <213> *Mycobacterium tuberculosis*

<400> 233	
ggtgctgcgc gccgagggt tgcaggtcag cctggtgaac tctaaccgg ccaccatcat	60
gaccgacccg gagttcgccg accacaccta cgtagagccc atcaccgccg cgttcgtgga	120
gcgggttatc gcccaacagg ccgagcgggg caacaagatc gacgccctgc tggcgaccct	180
gggtgggcag accgcgctga acaccgcggt cgcgctgtac gagagcgggg tgctggaaaa	240
gtacggcgtg gaactcatcg gcgccgattt cgacgccatc cagcgcggcg aggaccggca	300
gcggttcaag gacatcgctg ccaaggccgg tggcgaatcc gcccgagacc gagtgtgttt	360
caccatggcc gaagtgcgtg agacggtcgc cgagctcggc ctgccggtgg tggcgcggcc	420
gagcttcacc atgggcgggc tgggttcggg gatagcgtac tccaccgacg aggtcgaccg	480

gatggccggc gccgggctgg cggcctcgcc cagcgccaac gtgctcatcg aggaatcgat 540
 ttacggctgg aaggaattcg aactcgagct gatgcgcgac ggccacgaca atgtggtggt 600
 ggtgtgctcg atcgaaa 617

<210> 234
 <211> 617
 <212> DNA
 <213> *Mycobacterium bovis* subspecies *bovis*

<400> 234
 ggtgtgctgc gccgagggct tgcaggtcag cctggtgaac tctaattccg ccaccatcat 60
 gaccgacccg gagttcgccg accacaccta cgtagagccc atcaccctcg cgttcgtgga 120
 gcgggttata gcccaacagg ccgagcgggg caacaagatc gacgccctgc tggcgaccct 180
 ggggtgggcag accgcgctga acaccgcggt cgcgctgtac gagagcgggg tgctggaaaa 240
 gtacggcgtg gaactcatcg gcgccgattt cgacgccatc cagcgcggcg aggaccggca 300
 gcggttcaag gacatcgctc ccaaggccgg tggcgaatcc gcccgagcc gagtgtgttt 360
 caccatggcc gaagtgcgtg agacggtcgc cgagctcggc ctgccggtgg tgggtgcggcc 420
 gagcttcacc atgggcgggc tgggttcggg gatagcgtac tccaccgacg aggtcgaccg 480
 gatggccggc gccgggctgg cggcctcgcc cagcgccaac gtgctcatcg aggaatcgat 540
 ttacggctgg aaggaattcg aactcgagct gatgcgcgac ggccacgaca acgtggtggt 600
 ggtgtgctcg atcgaaa 617

<210> 235
 <211> 615
 <212> DNA
 <213> *Mycobacterium avium* subspecies *paratuberculosis*

<400> 235
 ggtgtcgaag gccgagggcc tgcaggtcag cctggtcaac tccaaccg ccaccatcat 60
 gaccgatccg gagtacgccg accacaccta cgtcgagccc atcacgccg ccttcgtcga 120
 acgggtgatc gcgcagcagg ccgagcgggg caacaagatc gacgcgctgc tggccaccct 180
 gggcgggcag accgcgctga acaccgccgt cgcgctgtac gagaacgggg cgctggaccg 240
 ctacgggggtg gaactgatcg gcgccgactt cgacgccatc cagcgcggcg aggaccggca 300
 gcggttcaag gacatcgctc ccaaggctcg cggtgaatcc gcccgagcc gagtgtgttt 360
 caccatggac gaggtgcgcg agaccgtcgc cgaactgggc ctgccggtgg tgggtgcggcc 420

cagcttcacc atgggcgggc tgggctcggg gatggcgcgc tccgtcgagg aggtcgaccg 480
 gatggccggc gccgggctgg ccgaaagccc cagcgccaac gtgctgatcg aggaatccat 540
 ctacggctgg aaggaattcg aactcgagct gatgcgcgac ggcaacgaca acgtcgtcgt 600
 ggtgtgctcg atcga 615

<210> 236
 <211> 600
 <212> DNA
 <213> *Mycobacterium leprae*

<400> 236
 caagtgagtc tggtaactc taaccgggcc accatcatga ccgatccgga gttcgccgac 60
 cacacctatg tcgagccgat tacgccggcc ttcgtggagc gggtgattgt tcagcaggcc 120
 gagcgtggca acaggattga cgctttgcta gccaccttag gtgggcagac cgcgctcaac 180
 acagcggtag cgctgtacga aaacggagtg ttggagcgct atggcgtcga gctcatcggt 240
 gctgatttcg aggtatcca gcgtggtgag gaccggcagc gattcaaaga tctcgtcgct 300
 aaggttggtg gtgaatccgc tcgcagtaaa gtgtgtttca ccatggatga ggtgcgtgaa 360
 acagtcgagg atcttggcct tccggtggtg gtgcggccaa gtttcacgat gggcggattg 420
 ggttcgggca tggctcactc cgacgaggag gttggccgga tggccggcgc cgggctggta 480
 gcttcaccta gtgccaacgt gctgatcgag gaatcggtct atggttgaa ggaattcgaa 540
 ctcgagctaa tgcgcgatgg acacgacagc gtcgtggtgg tgtgctcgat cgagaacggt 600

<210> 237
 <211> 618
 <212> DNA
 <213> *Nocardia farcinica*

<400> 237
 ggtgtcaag tccgagggcc tgcgcgtgtc gctggtgaac tcgaaccggg ccacgatcat 60
 gaccgatccc gagttcgccg acgccaccta cgtcgagccg atcaccgccg aattcgtcga 120
 gaaggtcatc gccaaaggagc gccccgacgc gatcctggcg accctcggcg ggcagaccgc 180
 gctcaacacc gcggtcgcgc tgcacgagcg cggcgtgctg gagaagtacg gcgtcgaact 240
 gatcggcgcc gacttcgacg ccatccagcg cggtgaggac cggcagaagt tcaaggacat 300
 cgtcgccaaag gtcggcggtg agagcgcccc ctcgcgggtc tgcttcacca tggacgaggt 360
 ccgcgagacc gtcgccgaac tgggcttccc ggtcgtcgtg cggccctcgt tcaccatggg 420
 cgggctcggc tcgggcatgg cctacaacga cgaggacctg gaccggatcg ccggtggcgg 480

cctggccgcc	tcgccgaccg	ccaacgtcct	gatcgaggag	tccatcctcg	gctggaagga	540
atacgagctc	gagctcatgc	gcgacggccg	cgacaacgtc	gtggtggtct	gctccatcga	600
gaacgtcgac	ccgatggg					618

<210> 238
 <211> 525
 <212> DNA
 <213> *Streptomyces coelicolor*

<400> 238	
ccggcgacga	tcattgaccga
cccggagatc	gccgacgcca
cctacgtcga	gccgatcacc
	60
cccgagttcg	tcgagaagat
catcgccaag	gagcgccccg
acgccctcct	gcccacgctc
	120
ggcggccaga	cggccctgaa
caccgcgac	tccctgcacg
gcaacggcgt	cctggagaag
	180
tacggcgctc	aactgatcgg
cgccaatgtg	gaggccatca
acaagggcga	ggaccgcgac
	240
ctgttcaagg	aggtcgctga
ggaggtccgc	aagaagatcg
gccacggcga	gtccgcccgg
	300
tectacatct	gccactccat
ggacgacgtc	ctcaaggcg
tcgacgcgct	cggcggctac
	360
cccgtcgtcg	tccgcccctc
cttcaccatg	ggcggcgccg
gctccggctt	cgcccacgac
	420
gaggacgaac	tgcgcccgat
cgccggacag	ggcctcacc
tctcgccgac	caccgaggtg
	480
ctcctggagg	agtcacatcct
cggctggaag	gagtacgagc
tggag	
	525

<210> 239
 <211> 618
 <212> DNA
 <213> *Streptomyces avermitilis*

<400> 239	
atcctgcgcg	ccgagggcct
cagggtcac	ctggtcaact
ccaacccggc	gacgatcatg
	60
accgaccggg	agatcgccga
cgccacctac	gtcgagccga
tcaccccgga	gttcgtcgag
	120
aagatcatcg	ccaaggagcg
gccggacgcg	ctgctgcca
ccctcggtgg	tcagacggcc
	180
ctgaacaccg	ccatctccat
gcacgagcag	ggtgtgctgg
agaagtacgg	tgtcgagctg
	240
atcggcgcca	acgtcgaggc
gatcaacaag	ggcgaggacc
gcgacctgtt	caagggcgtc
	300
gtcgaggccg	tccgcgcgaa
gatcgggcac	ggcgaatccg
cccgtcgggt	catctgccac
	360
tccatggacg	acgtgctcga
gggcgtcgag	accctcggcg
gttaccctgt	cgtcgtccgt
	420
ccctccttca	ccatgggcgg
cgccggctcc	ggcttcgcgc
acgacgagga	ggagctgcgc
	480
cgcacgcgcg	gtcagggcct
gacgctctcc	ccgaccaccg
aggtgctcct	ggaggagtcc
	540

atcctcgggt ggaaggagta cgagctggag ctgatgcgcg acaagaacga caacgtcgtg 600
gtcgtctgct ccatcgag 618

<210> 240
<211> 625
<212> DNA
<213> *Corynebacterium efficiens*

<400> 240
tgctcaagga ggagggcctg cgcgtcacc tcataactc caaccggcc accatcatga 60
ccgaccccgga gatggcggac cacacctacg tcgagccgat cgagcccgag tacatcgaga 120
agatcttcca gaaggagatc gaacagggcc acccgatcga caccgtcctg gcaaccctcg 180
gcggacaaac cgcccttaac gctgccatcc agctggaccg cctcggcatc ctggagaagt 240
acaacgtcga gctcatcggt gccgacatcg acgcatcga gcgtgggtgag gaccgccaga 300
aattcaagga catcgctgcc accatcggtg gtgaatcagc acgctccgcc gtctgccaca 360
acatggatga ggtctacgcc accgtcgagg agctcggtct cccggtcgtc gtgcgcccct 420
ccttcacat ggggtggtctg ggttccggtc tggcctacac catggaggac ctcgaccgca 480
tcgcccggcg tggcctcgcc gcctccccgg aggccaatgt cctgatcgag gagtccatcc 540
tcggctggaa ggaatacgag ctggagctca tgcgcgacgg cgatgacaat gtggtggtca 600
tctgctccat cgagaacgtc gatgc 625

<210> 241
<211> 636
<212> DNA
<213> *Corynebacterium glutamicum*

<400> 241
ctgaaggaag agggactgcg cgtcaccctc atcaactcca acccagcaac gatcatgacc 60
gaccagaaa tggctgacca cacctacgtg gagccaatcg agccggaata catcgacaag 120
attttcgcta aggaaatcga gcagggccac ccaatcgacg ccgtcctggc aacccttggt 180
ggccagactg cacttaacgc agctatccag ctggatcgcc tcggcatcct ggaaaagtac 240
ggcgttgaac tcatcggtgc agacatcgat gccattgagc gcggcgaaga tcgccagaag 300
ttcaaggata ttgtcaccac catcggtggc gaatccgcgc gttcccgct ctgccacaac 360
atggaagaag tccacgagac tgtcgcagaa ctcggccttc cagtagtcgt gcgtccatcc 420
ttcactatgg gtggcctggg ctccggtctt gcatacaaca ccgaagacct tgagcgcac 480
gctggtggcg gacttgctgc atctcctgaa gcaaacgtct tgatcgaaga atccatcctt 540

ggttggaagg aattcgagct cgagctcatg cgcgataccg cagacaacgt tgtgggtatc 600
 tgctccattg aaaacgtcga cgcactgggc gtgcac 636

<210> 242
 <211> 525
 <212> DNA
 <213> Bordetella parapertussis

<400> 242
 cccgccacca tcatgaccga ccccgaaacg gcggacgtca cctatatcga gcccatcacg 60
 tggcaagcgg tcgagaagat catcgagcgc gagaagcccg atgcgctgct gccacccatg 120
 ggtggccaga ccgcgctgaa ctgcgcgctc gacctggccc accacggcgt gctgaaaaag 180
 cacaacgtcg agctgatcgg cgccaacgag caccgccatcg agaaggccga agaccgccag 240
 aagttcaagc aggccatgac cgacatcggc ctggaatcgg ccaagtcggg cgtggccccac 300
 tcgatggacg aggcctggga agtgcagcgc cgcacatcgg ccgacatcgg caccggcggc 360
 tttcccgtcg tcatccgccc cagcttcacg ctgggcggct cgggcggcgg catcgcctat 420
 aacgccgagg aattcgaggt catctgccgc cgcggcctgg aagcctcgcc gaccaaggag 480
 ctgctgatcg aggagtcgct gctcggctgg aaagagttcg agatg 525

<210> 243
 <211> 617
 <212> DNA
 <213> Bordetella bronchiseptica

<400> 243
 gcgctcaagg ccgaggggta ccggaccatc ctggtcaaca gcaaccccg caccatcatg 60
 accgaccccg aaacggcgga cgtcacctat atcgagccca tcacgtggca agcggtcgag 120
 aagatcatcg agcgcgagaa gcccgatcgc ctgctgcca ccatgggcgg ccagaccgcg 180
 ctgaactgcg cgctcgacct ggcccaccac ggcgctgctga aaaagcacia cgtcgagctg 240
 atcggcgcca acgagcacgc catcgagaag gccgaagacc gccagaagtt caagcaggcc 300
 atgaccgaca tcggcctgga atcggccaag tcgggcgtgg ccactcgat ggacgaggcc 360
 tgggaagtgc agcgcgcgat cgcggccgac atcggcacgg cgggctttcc cgtcgtcatc 420
 cgccccagct tcacgtggg cggctcgggc ggcgcatcg cctataacgc cgaggaattc 480
 gaggtcatct gccgccgcgg gctggaagcc tcgccacca aggagctgct gatcgaggag 540
 tcgctgctcg gctggaaaga gtctgagatg gaagtgggtgc gcgacaaggc ggacaactgc 600

atcatcgtct gctcgat 617

<210> 244
 <211> 617
 <212> DNA
 <213> Bordetella pertussis

<400> 244
 gcgctcaagg ccgaggggta ccggaccatc ctggtcaaca gcaaccccg caccatcatg 60
 accgaccccg aaacggcgga cgtcacctat atcgagccca tcacgtggca agcggtcgag 120
 aagatcatcg agcgcgagaa gcccgatgcg ctgctgcccc ccatgggtgg ccagaccgcg 180
 ctgaactgcg cgctcgacct ggcccaccac ggcgtgctga aaaagcacia cgctcgagctg 240
 atcggcgcca acgagcacgc catcgagaag gccgaagacc gccagaagtt caagcaggcc 300
 atgaccgaca tcggcctgga atcggccaag tcgggcgtgg ccactcgat ggacgaggcc 360
 tgggaagtgc agcgccgcat cgcggccgac atcggcacgg cgggctttcc cgctcgatc 420
 cgccccagct tcacgtggg cggctcgggc ggcggcatcg cctataacgc cgaggaattc 480
 gaagtcatct gccgcccgg gctggaagcc tcgccgacca aggagctgct gatcgaggag 540
 tcgctgctcg gctggaaaga gttcgagatg gaagtgggtc gcgacaaggc ggacaactgc 600
 atcatcgtct gctcgat 617

<210> 245
 <211> 616
 <212> DNA
 <213> Burkholderia mallei

<400> 245
 ggcgttgctg gaggagggct acaaggatcat cctcgtcaac agcaacccgg cgacgatcat 60
 gaccgatccg aacacggcgg acgtcacgta catcgagccg atcacgtggg aagtcgtcga 120
 gcgcatcatc gcgaaggagc gccccgacgc gatcctgccg acgatgggcg gccagaccgc 180
 gctgaactgc gcgctcgacc tgttccacca cggcgtgctc gagaagtacg gcgctcgagct 240
 gatcggcgcg tcgccggagg cgatcgacaa ggccgaagac cgccagaagt tcaaggacgc 300
 gatgacgaag atcggcctcg gctcggcgaa gtccggcatc gcgcactcga tggaagaggc 360
 gctgaagggtg cacgcggaca tcgcggcggc gacgggcggc agcggctacc cggtcgtgat 420
 ccgcccgctg ttcacgctcg gcggctcggg cggcggcatc gcgtacaacc gcgaggagtt 480
 cgaggagatc tgcaagcgcg gcctcgatct gtcgccgacg cgcgagctgc tgatcgagga 540
 atcgtgctc ggctggaagg agtacgagat ggaggtcgtg cgcgatcgcg ccgacaactg 600

catcatcgtc tgctcg 616

<210> 246

<211> 616

<212> DNA

<213> Burkholderia pseudomallei

<400> 246

ggcgttgctg gaggagggct acaagggtcat cctcgtcaac agcaaccgag cgacgatcat 60
gaccgatccg aacacggcgg acgtcacgta catcgagccg atcacgtggg aagtcgtcga 120
gcgcacatc gcgaaggagc gccccgacgc gatcctgccg acgatgggag gccaaaccgc 180
gctgaactgc gcgctcgacc tgttccacca cggcgtgctc gagaagtacg gcgctcgagct 240
gatcggcgcg tcgccggagg cgatcgacaa ggccgaagac cgccagaagt tcaaggacgc 300
gatgacgaag atcggcctcg gctcggcgaa gtccggcacc gcgcactcga tggaagaggc 360
gctgaagggtg cacgcggaca tcgcggcggc gacggggcgg agcgggtacc cggtcgtgat 420
ccgcccgtcg ttcacgctcg gcggctcggg cggcggcacc gcgtacaacc gcgaggagtt 480
cgaggagatc tgcaagcgcg gcctcgatct gtcgccgacg cgcgagctgc tgatcgagga 540
atcgctgctc ggctggaagg agtacgagat ggaggctcgtg cgcgatcgcg ccgacaactg 600
catcatcgtc tgctcg 616

<210> 247

<211> 625

<212> DNA

<213> Pseudomonas putida

<400> 247

gcctgtaaag ccctgcgcga ggaagggttc cgcgtcatcc tgggtgaactc caaccagcc 60
accatcatga ccgaccggc catggctgac gccacctaca tcgagccgat caagtggcaa 120
tcggtggcca agatcatcga gaaagagcgc ccggacgccg tcctgccgac catgggtggc 180
cagaccgccc tgaactgcgc cctggacctg gagcgccacg gcgttctgga gaagtccggc 240
gtggagatga tcggtgcca cgtgacacc atcgacaagg ccgaagaccg ttcgcgcttc 300
gacaaggcca tgaaggacat cggcctggag tgcccgcgct ccggtatcgc ccacagcatg 360
gaagaggcca atgcggtcct cgagaagctc ggcttcccgt gcatcattcg cccgtcgttc 420
accatgggag gcaccggcgg cggtatcgct tacaaccgtg aagagttcga agaaatctgc 480
acccgtgggtc tggacctgtc gccgacccaa gagctgctga tcgacgaatc gctgatcggc 540

tggaaggaat acgagatgga ggtgggtccgc gacaagaagg acaactgcat catcgtctgc	600
tcgatcgaga acttcgaccc gatgg	625

<210> 248
 <211> 3234
 <212> DNA
 <213> *Yersinia pseudotuberculosis*

<400> 248	
atgccaaaac gtacagatat aaaaagcatc ctgattctgg gcgcaggccc gattgttatac	60
ggccaggctt gtgagtttga ctactccggt gcccaagcgt gtaaagcact gcgcgaagag	120
ggttaccgtg tcattttggt gaactccaat ccggcgacta tcatgactga cccggaaaatg	180
gccgatgcaa cttatatcga gccaatcatc tgggaagtgg tgcgtaagat tatcgaaaaa	240
gagcgtccag atgctgtttt gcctacgatg ggtggccaaa ctgcactgaa ctgtgcattg	300
gaactggagc gtcaggggtgt tctggcagaa tttggcgtca ccatgattgg tgcgaccgcc	360
gatgccatcg ataaagccga agaccgccgt cgctttgata tcgcgatgaa gaagattggt	420
ctggatacgg cccgctcagg tattgcgcat aacatggaag aagcactggc tgttgccgct	480
gatgtgggct tcccgtgcat tatccgcca tcctttacga tggggggcac tgggtggcgt	540
atcgcttata accgtgaaga gttcgaagag atctgcgagc gcggtctgga tttgtcacca	600
accaaagagt tgttgattga cgaatcgctg attggctgga aagagtacga gatggaagtt	660
gtccgtgata aaaacgacaa ctgcatcatc gtttgcacca ttgaaaactt cgatgcgatg	720
gggattcaca ccggcgactc tatcactgtc gcaccggctc agaccctgac cgataaagaa	780
taccaaataca tgcgtaatgc ctcgatggcg gtactgcgtg aaatcggggg agaaaccggg	840
ggctctaacg tacagttctc cgtcaaccca aaaaatggtc gtttgattgt cattgagatg	900
aacccgcgtg tttctcgctc ttcagcactg gcctctaaag caaccggttt cccgattgcc	960
aagattgccg ccaaactggc ggtcgggttac aactggatg agttgatgaa tgacatcacc	1020
ggtggccgta ctctgcgtc ctttgagcct tctatcgact atgttggttac caagatcca	1080
cgctttaact ttgaaaaatt tgcgggtgcc aacgaccgtt tgaccacgca aatgaagtct	1140
gtgggtgaag tcatggccat tggccgcacg cagcaagaat cactgcaaaa agcactgcgc	1200
gggctggaag tgggcgcgac cggttttgac ccgaaagtga gcctggatga tcccgaagca	1260
ctgactaaaa ttcgtcgtga attgaaagaa gcgggtgcag aacgtatctg gtatatcgct	1320
gatgctttcc gtgcgggcat gtcggttgat ggtgtgttca atctgaccaa tgttgatcgc	1380

tggttcctgg tgcagattga agagctgggt cgtctggaag agagcgtggc agaactcgggt	1440
atcaacgggt tgactgctga atttatgcgt cacttgaaac gtaaagggtt cgccgatgct	1500
cgtttggtta aattgggtcg tgcagcagaa agtgaagtcc gtaaactgcg ttacaaatat	1560
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 <213> Campylobacter jejuni

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<211> 3357

<212> DNA

<213> *Corynebacterium diphtheriae*

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 <223> n is a, c, g, or t

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<210> 258

<211> 464

<212> DNA

<213> *Proteus mirabilis*

<220>

<221> misc_feature

<222> (9)..(10)

<223> n is a, c, g, or t

<400> 258

```
cttatggtgn gcaattgggt tatccattgt attatctatt ggttatgaca actttgagca    60
gttactgtcc ggtgctcatg ctatggataa tcactttaga accactgaag ctgaaaataa    120
tattccgatg atattggcgc ttattggcat ttggtataac aatttttttg gtaccgaaac    180
tgaagcgatt ctgccatacg atcaatatat gcaccgtttt gctgcttact tccaacaagg    240
taatatggaa tccaatggta aatatatcga ccgtgatgga aacaaagtca gttaccaaac    300
cggacctatt atttggggag agccggggac taatggtcag catgcggttt atcaattaat    360
tcatcaagga accaaactga tcccttgtga ttttattgca ccagcgatca gccataatcc    420
attatctgat catcatgcaa aactaatgtc gaacttcttc gcaa                    464
```

<210> 259

<211> 462

<212> DNA

<213> *Proteus vulgaris*

<220>

<221> misc_feature

<222> (8)..(8)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (461)..(461)
 <223> n is a, c, g, or t

<400> 259
 ttatggtngc tattggtttg tctatcgctc tttccgttgg ttatgataat tttgagcaat 60
 tattggaagg tgcccatgca atggataacc atttccaaac gacagctgct gaaaataacc 120
 taccaatgat cctcgcgctg attggcattt ggtataacaa tttttttggt acagaaactg 180
 aagcgattct gccctatgat caatacatgc atcgttttgc agcctatttc caacaaggca 240
 atatggagtc aaatggtaag tatattgata gcgatggtaa cgcagttaac tatcaaactg 300
 gacctattat ttggggtgaa ccaggaacta atggtcagca tgcgttttac caattaattc 360
 atcagggtag aaaaatgata ccttgtgatt ttattgcgcc tgcaattagt cataatccat 420
 taagtgatca ccatgctaag ttgatgtcta acttcttcgc na 462

<210> 260
 <211> 462
 <212> DNA
 <213> Enterobacter aerogenes

<400> 260
 ctgtgggtccg cctcgggtctg tctatcattc tgtccgctcg cttcgacaac ttcgttcagc 60
 tgctgtccgg cgccacgcc atggacaaac acttctctac cagccggct gagaaaaacc 120
 tgccggtact gctggcgctg attggtatct ggtacaacaa tttcttcggc gccgaaaccg 180
 aagcaattct gccgtacgat cagtacatgc atcgctttgc cgcttacttc cagcagggca 240
 acatggaatc caacggtaag tacgttgacc gtaacggcaa cgctcgatgat taccagactg 300
 gccctatcat ctggggcgag ccgggggacta acggtcagca cgcgttctat cagctgatcc 360
 accagggcac caaaatggta ccgtgcgatt tcatcgcccc ggctatcacc cataaccgcg 420
 tgtctgacca ccatcagaaa ctgctgtcta acttcttcgc aa 462

<210> 261
 <211> 464
 <212> DNA
 <213> Klebsiella pneumoniae

<220>
 <221> misc_feature

<222> (462)..(462)
 <223> n is a, c, g, or t

<400> 261
 ctgtggtcgg cgattggtct gtccatcatt ctctccgtgg gcttcgacaa cttcggttgag 60
 ctgctgtccg gcgcgcacgc gatggataag cacttctcca ccaactccggc ggagaaaaac 120
 ctgccggtgc tgctggcgct gatcggcatc tgggtacaaca acttcttcgg tgcggaaacc 180
 gaagcgattc tgccgtacga ccagtacatg caccgctttg ccgcttactt ccagcagggc 240
 aacatggagt ccaacggtaa gtatgttgac cgtaacggcc acgcggtaga ctaccagact 300
 ggcccaatca tctgggggtga gccgggcacc aacggtcagc acgcgttcta ccagctgac 360
 caccagggca ccaaaatggt accgtgcgat ttcacgcctc cggctatcac ccacaaccgc 420
 ctgtctgacc accatcagaa actgctgtct aacttcttcg cnaa 464

<210> 262
 <211> 464
 <212> DNA
 <213> Escherichia coli

<220>
 <221> misc_feature
 <222> (9)..(9)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (462)..(462)
 <223> n is a, c, g, or t

<400> 262
 tttgtggtng cgattggcct gtcgattggt ctctccatcg gctttgataa cttcggttgaa 60
 ctgctttctg gcgcacacgc gatggacaag catttctcca ccacgcctgc cgagaaaaac 120
 ctgcctgtac tggtggcgct gattggcatc tgggtacaaca atttctttgg tgcggaaact 180
 gaagcgattc tgccgtatga ccagtatatg caccgtttcg cggcgtactt ccagcagggc 240
 aatatggagt ccaacggtaa gtatgttgac cgtaacggta acgttgtgga ttaccagact 300
 ggcccgatta tctgggggtga accaggcact aacggtcagc acgcgttcta ccagctgac 360
 caccagggaa ccaaaatggt accgtgcgat ttcacgcctc cggctatcac ccataaccgc 420
 ctctctgac accaccagaa actgctgtct aacttcttcg cnaa 464

<210> 263
 <211> 465

<212> DNA
<213> Escherichia coli

<220>
<221> misc_feature
<222> (10)..(10)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (463)..(463)
<223> n is a, c, g, or t

<400> 263
ctttgtggtg gcgattggcc tgcgattgt tctctccatc ggctttgata acttcggtga 60
actgctttcc ggcgcacacg cgatggacaa gcatttctcc accacgcctg ccgagaaaaa 120
cctgcctgta ctgctggcgc tgattggcat ctggtacaac aatttctttg gtgcggaaac 180
tgaagcgatt ctgccgtatg accagtatat gcaccgtttc gcggcgtagt tccagcaggg 240
caatatggag tccaacggta agtatgttga ccgtaacggt aacgttgtgg attaccagac 300
tggtcccgatt atctgggggtg aaccaggcac taacggtcag cacgcgttct accagctgat 360
ccaccaggga accaaaatgg taccgtgcga tttcatcgct ccggctatca cccataaccc 420
gctctctgat catcaccaga aactgctgtc taacttcttc gcnaa 465

<210> 264
<211> 463
<212> DNA
<213> Citrobacter freundii

<220>
<221> misc_feature
<222> (1)..(1)
<223> n is a, c, g, or t

<400> 264
ntgtggtctg caatcggcct gtccatcatc ctgtccgtag gcttcgacaa ttttgttgag 60
ctgctctccg ggcgcgatgc gatggacaaa cacttctcca ccaccccggc tgagaaaaac 120
ctgccggtgc tgctggcgct gatcggtatc tgggtacaac acttcttcgg tgccgaaacc 180
gaagcgattc tgccgtatga ccagtatatg cacggtttcg cggcctactt ccagcagggc 240
aacatggaat ccaacggtaa atacgttgac cgtaacggca atgcggtgga ttaccagact 300
ggcccaatca tctgggggtga gccgggtact aacggccagc atgcgttcta ccagctgac 360
caccagggca ccaaaatggt gccgtgcgat ttcatcgcg cggcaatcac ccacaacccg 420

ctgtcggatc accatccgaa actgctgtct aacttcttcg caa

463

<210> 265
<211> 465
<212> DNA
<213> Haemophilus influenzae

<220>
<221> misc_feature
<222> (4)..(4)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (8)..(8)
<223> n is a, c, g, or t

<400> 265
cttnggtngc cttggtcttt caattgcgct atcaattggc ttgaaaaact ttgaagcgtt 60
attaatggc gcgcatgaaa tggatgaaca tttccgctct actccaatcg aacaaaatat 120
cccaaccact ttagcattag ttggtttatg gaataccaat tttcttggtg cgcaaacaga 180
agcgatctta ccttatgatc aatatttaca tcgcttcgca gcttattttc aacaaggtaa 240
tatggaatca aatggtaa atgtggatcg tgatggcaat gtcattaaca attatcaaac 300
tggccctatc atttggggag aacctggtac aaacggacaa cacgcgttct atcaattaat 360
tcataaggc actacttta ttccttgtga ttttatcgca cccgctcaaa gccataaccc 420
attggcagat catcacaata aattgctttc aaacttcttc gccaa 465

<210> 266
<211> 462
<212> DNA
<213> Serratia marcescens

<220>
<221> misc_feature
<222> (418)..(418)
<223> n is a, c, g, or t

<400> 266
tgtggtcggc gatcggtttg tcgattgcgc tgtccatcgg ttatgacaac ttcgagcagc 60
tgctgagcgg cgcgcacgcc atggacaagc acttcgccga aacgccggcg gagaaaaacc 120
tgccggtggt gctggcgctg atcggtatatt ggtacaacaa cttctttggc gccgaaaccg 180
aagccattct gccgtacgat cagtacatgc accgttttgc cgcttacttc cagcagggca 240

acatggaatc caacggcaag tacgtcgatc gcaacggcaa cccggtggat taccagaccg 300
 gtcccatcat ttggggcgag ccgggcacca acggccagca tgcgttctat cagttgatcc 360
 accagggcac caagctggtg ccgtgcgatt tcatcgcgcc ggccatcagc cataaccngc 420
 tgggcgatca tcacgcaaaa ctgctgtcca acttcttgcc aa 462

<210> 267
 <211> 462
 <212> DNA
 <213> *Morganella morganii*

<400> 267
 gtggtcggcg attggtctgt ctatcgtgct ctctgtcggt tatgacaact tcacgcagtt 60
 gctcgatggt gcgtatgcca tggacaagca cttcaccgaa actgaattct cacagaatat 120
 tccggtgctg ctggcgctga ttggtctgtg gtacaacaat ttcttcgggtg cggaaacaga 180
 agcaattctg ccttatgatc agtacatgca ccgctttgcg gcctatattcc agcagggcaa 240
 tatggagtcc aacgggaaat atgtggatcg taacggtaag gtggtttctc atcagaccgg 300
 tccggttata tggggtgagc ccggcaccaa cgggcagcat gcgttttata agctgatcca 360
 tcagggtacc aaactgatcc cgtgtgattt tatcgacccg gctcagagcc ataatccgct 420
 gggggatcat cacagtaaac tgctgtcgaa cttcttcgcc aa 462

<210> 268
 <211> 461
 <212> DNA
 <213> *Klebsiella oxytoca*

<400> 268
 gtggtagcct cggcctgtcc atcatcctgt ccgtgggctt cgacaacttt gttgagctgc 60
 tctccggcgc gcacgcgatg gataaacact tctccaccac cccggctgag aaaaacctgc 120
 cggtgctgct ggcgctgatc ggtatctggt acaacaactt cttcggcgct gaaaccgaag 180
 cgattctgcc gtacgaccag tatatgcacc gttttgccgc ttacttccag cagggcaaca 240
 tggaatccaa cggtaaatac gttgaccgta acggcaacgc cgtggattac cagacggggc 300
 caatcatctg gggcgagccg gggaccaacg gtcagcacgc gttctaccag ctgattcacc 360
 aggggaccaa aatggtgcct tgcgacttta tcgcgccggc gattacgcat aaccgctgt 420
 ccgatcacca tccgaagctg ctgtctaact tcttcgccca a 461

<210> 269

<211> 463
 <212> DNA
 <213> *Shigella sonnei*

<220>
 <221> misc_feature
 <222> (9)..(9)
 <223> n is a, c, g, or t

<400> 269
 tttgtggtng cgattggcct gtcgattggt ctctccatcg gctttgataa cttcgttgaa 60
 ctgctttctg ggcgcacacgc gatggacaag catttctcca ccacgcctgc cgagaaaaac 120
 ctgcctgtcc tgctggcgct gattggcatc tggtaacaata atttctttgg tgcggaaact 180
 gaagcgattc tgccgtatga ccagtatatg caccgtttcg cggcgactt ccagcagggc 240
 aatatggagt ccaacggtaa gtatgttgac cgtaacggta acgttgtgga ttaccagact 300
 ggcccgatta tctgggggtga accaggcact aacggtcagc acgcgttcta ccagctgac 360
 caccaggga ccaaaatgg accgtgcgat ttcacgccc cggctatcac ccataaccgc 420
 ctctctgac accaccagaa actgctgtct aacttcttcg caa 463

<210> 270
 <211> 463
 <212> DNA
 <213> *Salmonella enteritidis*

<220>
 <221> misc_feature
 <222> (13)..(13)
 <223> n is a, c, g, or t

<400> 270
 gctgtggtct gentcgggct gtccattatt ctgtccgctg gtttcgacaa ctttgtcgag 60
 ctgctttccg ggcgcacacgc gatggacaag catttctcca ccaactccgc ggagaaaaac 120
 ctaccattc tgctggcggt gattggcatc tggtaacaata atttcttcgg cgcggaaacc 180
 gaagccattc tgccgtacga ccagtatatg caccgtttcg ccgcctactt ccagcagggc 240
 aacatggaat ccaacggtaa atacgttgac cgtagcggca acgcgttgga ttaccagaca 300
 ggcccaatta tctggggcga accaggcacc aacggtcagc acgcgtttta tcaattgatt 360
 caccagggt ctaaaatgg gccgtgtgat ttatcgccc cggctatcac ccataaccgc 420
 ctatccgac atcatcagaa gctgctgtct aacttcttcg caa 463

<210> 271
 <211> 464
 <212> DNA
 <213> Salmonella enterica hadar

<220>
 <221> misc_feature
 <222> (14)..(14)
 <223> n is a, c, g, or t

<400> 271
 cgctgtgggc tgcntcgggc tgtccattat tctgtccgtc ggtttcgaca actttgtcga 60
 gctgctttcc ggcgcgcacg cgatggacaa gcatttctcc accactccgg cggagaaaaa 120
 cctacccatt ctgctggcgt tgattggcat ctggtacaac aatttcttcg gcgcggaaac 180
 cgaagccatt ctgccgtacg accagtatat gcaccgtttc gccgcctact tccagcaggg 240
 taacatggaa tccaacggta aatacgttga ccgtagcggc aacgcggtgg attaccagac 300
 aggcccaatt atctggggcg aaccaggcac caacggtcag cacgcgtttt atcaattgat 360
 tcaccaggt actaaaatgg tgccgtgtga ttttatcgcc ccggtatca ccataaccc 420
 gctatccgat catcatcaga agctgctgtc taacttcttc gcaa 464

<210> 272
 <211> 466
 <212> DNA
 <213> Salmonella enterica brandenburg

<220>
 <221> misc_feature
 <222> (1)..(1)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (464)..(464)
 <223> n is a, c, g, or t

<400> 272
 ncgctgtggt ctgcctcggg ctatccatta ttctgtccgt cggtttcgac aactttgtcg 60
 agctgctttc cggcgcacac gcgatggaca agcatttctc caccactccg gcggagaaaa 120
 acctaccgt tctgctggcg ttgattggca tctggtacaa caatttcttc ggcgcggaaa 180
 ccgaagccat tctgccgtac gaccagtata tgcaccgttt cgcgcctac ttccagcagg 240
 gcaacatgga atccaacggt aaatacgttg accgtaacgg caacgcggtg gattaccaga 300
 caggcccaat tatctggggc gaaccaggca ccaacggtca gcacgcgttt tatcaattga 360

ttcaccaggg tactaaaatg gtgccgtgtg attttatcgc cccggctatc acccataacc 420
 cgctatccga tcatcatcag aagctgctgt ctaacttctt cgcnaa 466

<210> 273
 <211> 464
 <212> DNA
 <213> Salmonella enterica derby

<220>
 <221> misc_feature
 <222> (13)..(13)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (462)..(462)
 <223> n is a, c, g, or t

<400> 273
 gctgtggtct gcntcgggct gtccattatt ctgtccgtcg gtttcgaca ctttgtcgag 60
 ctgctttccg ggcgcgcacg gatggacaag catttctcca ccaactccggc ggagaaaaac 120
 ctaccattc tgctggcggt gattggcatc tggtagaaca atttcttcgg cgcggaaacc 180
 gaagccattc tgccgtacga ccagtatatg caccggttcg ccgcctactt ccagcagggt 240
 aacatggaat ccaacggtaa atacgttgac cgtaacggca acgccgtgga ttaccagaca 300
 ggcccaatta tctggggcga accaggcacc aacggtcagc acgcgtttta tcaattgatt 360
 caccagggtta ctaaaatggt gccgtgtgat tttatcgccc cggctatcac ccataaccgg 420
 ctatccgac atcatcagaa gctgctgtct aacttcttcg cnaa 464

<210> 274
 <211> 463
 <212> DNA
 <213> Salmonella enterica virchow

<400> 274
 cgctgtggtc tgccctcgggc tgtccattat tctgtccgtc ggtttcgaca actttgtcga 60
 gctgctttcc ggcgcgcacg cgatggaca gcatctctcc accactccgg cggagaaaaa 120
 cctaccatt ctgctggcgt tgattggcat ctggtacaac aatttcttcg gcgcggaaac 180
 cgaagccatt ctgccgtacg accagtatat gcaccgtttc gccgcctact tccagcaggg 240
 taacatggaa tccaacggta aatacgttga ccgtaacggc aacgccgtgg attaccagac 300
 aggcccaatt atctggggcg aaccaggcac caacggtcag cgcgcgtttt atcaattgat 360

tcaccagggt actaaaatgg tgccgtgtga ttttatcgcc cgggctatca ccataaacc 420
gctatccgat catcatcaga agctgctgtc taacttcttc caa 463

<210> 275
<211> 464
<212> DNA
<213> Salmonella enterica typhimurium

<220>
<221> misc_feature
<222> (13)..(13)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (462)..(462)
<223> n is a, c, g, or t

<400> 275
gctgtggtct gcntcgggct gtccattatt ctgtccgtcg gtttcgaca ctttgtcgag 60
ctgctttccg ggcgcgcacg gatggacaag catttctcca ccaactccggc ggagaaaaac 120
ctacccattc tgctggcggt gattggcatc tgggtacaaca atttcttcgg cgcggaaacc 180
gaagccattc tgccgtatga ccagtatatg caccgtttcg ccgcctactt ccagcagggt 240
aacatggaat ccaacggtaa atacgttgac cgtaacggca acgcgtgga ttaccagaca 300
ggcccaatta tctggggcga accaggcacc aacggtcagc acgcgtttta tcaattgatt 360
caccagggtc ctaaaatggg gccgtgtgat tttatcgccc cggctatcac ccataaccgc 420
ctatccgatc atcatcagaa gctgctgtct aacttcttcg cnaa 464

<210> 276
<211> 464
<212> DNA
<213> Salmonella enterica paratyphi B

<220>
<221> misc_feature
<222> (14)..(14)
<223> n is a, c, g, or t

<400> 276
cgctgtggtc tgcntcgggc tgtccattat tctgtccgtc ggtttcgaca actttgtcga 60
gctgctttcc ggcgcgcacg cgatggacaa gcatttctcc accactccgg cggagaaaaa 120
cctacccatt ctgctggcgt tgattggcat ctggtacaac aatttcttcg ggcggaaac 180

cgaagccatt ctgccgtatg accagtatat gcaccgtttc gccgcctact tccagcaggg 240
taacatggaa tccaacggta aatacgttga ccgtaacggc aacgccgtgg attaccagac 300
aggcccaatt atctggggcg aaccaggcac caacggtcag cacgcgtttt atcaattgat 360
tcaccagggg actaaaatgg tgccgtgtga ttttatcgcc ccggtatca ccataaccc 420
gctatccgat catcatcaga agctgctgtc taacttcttc caaa 464

<210> 277
<211> 464
<212> DNA
<213> *Serratia liquefaciens*

<220>
<221> misc_feature
<222> (1)..(1)
<223> n is a, c, g, or t

<400> 277
ntgtggtcgg cgattggcct gtctatcgcc ctgtcagtgg gttacgagaa ttttgaacag 60
ttgctgagcg gcgcgcacgc gatggacaaa cacttcgcgc aaacgccggc agagcaaaac 120
ctgccggtgc tgctggcggt gatcggtatc tggtaacaac acttcttcgg tgcagaaacc 180
gaagctatcc tgccgtacga ccagtacatg caccggtttg ccgcttactt ccagcagggc 240
aacatggaat ccaacggtaa atatgtcgat cgcaacggca atccgggtgga ctaccagacc 300
ggcccaatca tctggggcga gccgggcacc aacgggcagc acgcgtttta ccaactgac 360
caccagggga ccaaactggt gccttgtgac tttatcgcg cggccatcag ccataatccg 420
ctgagcgacc accatgcaaa actgctgtcg aacttcttcg ccaa 464

<210> 278
<211> 1860
<212> DNA
<213> *Neisseria meningitidis* serogroup A

<400> 278
acagaaaatc ctcgaagaca cctgctgga acaatggcag tggctcaaac ctaaagaacc 60
gtaaacatcc tgcgtaacaa aatgccgtct gaaacgcccc caccgttcag acggcagacc 120
gtaaaacct caacccaat tctcccaaa tctcatcaat cttagccgta accgcagggg 180
cttttttaat caccgcgcc cattcgcggt cggtttcgcc cggccacttg ttggtcgcat 240
ccaaacccat tttgccgcca agtccgctga cggggctggc gaagtcgagg tagtcgatgg 300

gcgtgttttc catcaaaacg gtatcgcgca cggggtccat gcgcgtgggt accgcccaga 360
 tgactttcttt ccagtcgcgc acatccacat cgtcatccac cacaatgatg aatttggtgt 420
 acataaactg gcgcaggaac gaccagcagc ccatcatcac gcgcttggcg tgtccggcgt 480
 actgtttttt catgctcacc accgccatgc ggtaggagca gccttcgggc ggcaggtaaa 540
 aatcggatgat ttcggggaac tgcttttgca aaagcggtag gaacacttcg ttcaacgcca 600
 cgcccaaac ggcggttca tcgggcgggt tgctgtgta ggtagagtgg taaatcgggt 660
 tttcgcgcat ggtgatgcgt tcgaccgtaa acacggggaa atggctcctgc tcgttgtaat 720
 agcccggtgtg gtcgccgtat ggaccttcca acgcggtttc gtttggtatg atgacgcctt 780
 ccaacacgat ttctgcgcgg gcaggcactt gcaaactcgt gccgatacat ttcaccagtt 840
 ccgtccgcga accgcgcagc agtccggcaa actggtattc gctcaaggta tcgggaacgg 900
 gcgttaccgc gcccaaatg gtggcagggc cgcagccgag cacgacggcg acgggatacg 960
 gcgtatcggg attgagtttg cggaattcct gataatccag cgcgccgccg cgatgcgaca 1020
 gccagcgc atcagcttg tttatgccga ttaattgttg gcggtaaatg ccgagatttt 1080
 ggcgtttttt gtgcggcccg cgcgtgacgg tcaagcccca cgttaccagc ggcgcaacgt 1140
 cttccggcca gcaatgctga atcggaagt gatacaaatc aacgtcttcg ccttcccata 1200
 cgatttcctg acacggcgca tttttacca cgttcggcgc catgctccaa atgtctttca 1260
 agagcggcag tttggaaaac gcgtctttta tgcttttggg cggttcgggt tctttcaa at 1320
 acgccagcgt ctgcccatt tcgcgcagct tggacacgct gtccgcgccc atgccatcg 1380
 ccacacgttc gggcgtgccg aacaggtttg ccaacacggg ataatcatag cgcgtaccgt 1440
 cgggcttaac tgggtgttca aacaacaacg ccggcccttc ggcgcgcagc acgcggtcgg 1500
 cgatttcggt catttccaaa tgcggggaaa cggggtgcgc gatgcgtttg agtttgccct 1560
 gctgctcgag catggcgatg aagtcgcgca ggtctttgta tttcatattc atcctttttg 1620
 tccttttatc ctgagcaatc cgattcgat accgccccta tccttgctg cgcttcggca 1680
 tattctatgc cgtgataaaa gtcgcgtacc agcggatgtt cgctgccttg atggagtgtc 1740
 aacaaaggac gttgaccatc gggttgggta acgacattgc aatgcaaacc gaagggtgtc 1800
 gattcgtaag ggggcagccg gttgcagatc atgccgaaat aaacggcggt ttcagggttg 1860

<210> 279
 <211> 588
 <212> DNA
 <213> *Klebsiella oxytoca*

<400> 279
acgaccagac gcccatcatg acgcggtttcg cgtgaccggc gtactgcttc ttcacgtga 60
cgaccgccag gcgataggaa cagccttcag gcggcaaata gaaatccacg atttcaggaa 120
actgcttttg cagaatgggg acgaacactt cgttcagcgc aacgcccagt accgccggct 180
catccggcgg gcgcccggta taggtcgagt gatagatggc atcttcacgc tgagtaatgt 240
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tggcgggcac ctcaagatcg ttagagatgc acttcacgac ttcggttttg gtgcgcgcga 420
gtagcccggc aaaagcgtat tcggaaagag tatccggaac cggagtcacc gccccagaaa 480
tggttgccgg atcggcgccc agcgcgacgg agaccgggaa acgctcgcca ggacgcgccg 540
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<210> 280

<211> 1479

<212> DNA

<213> *Salmonella enterica* subsp. *enterica* serovar

<400> 280
atggacgcca tgaaatatca cgatttacgc gacttcctga cgctacttga gcaacagggg 60
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cgacgctgc gtgcgggtgg accggcggtt ctgtttgaaa gtccctaaagg ttacgccatg 180
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gatgtttccg ccttacggga agtgggtaaa ttattagcgt ttctgaaaga acctgagccg 300
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attgatgcga tttgggatga gctggctatc tttaaataa	1479

<210> 281
 <211> 1488
 <212> DNA
 <213> *Salmonella typhimurium*

<400> 281	
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atcgtcgacc gcacgctgcg tgccgggtgga ccggcggtgc tgtttgaaaa tcctaaaggt	180
tacgccatgc cgggtgctgtg caaccttttt ggcacgcca aacgcgtggc gatgggcatg	240
gggcaggatg atgtttccgc cttacgggaa gtgggtaaat tattagcggt tcttaaagaa	300
cctgagccgc cgaaaggctt tcgcgatctg tttgacaagc tgccgcagtt taagcaagtg	360
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ggcggcgcgc tggattttca ggagtgggta gccgcgcgtc cgggtgaacg tttcccggtc	660
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aatggccgg gcgaaacca acgcgagtg ggtcgtccta ttgttaaaga tcctgaagtt	1440
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<210> 282
 <211> 1494
 <212> DNA
 <213> Escherichia coli

<400> 282	
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cgcactttgc gtgccggtgg gcctgcgctg ttgttcgaaa accctaaagg ctactcaatg	180
ccggtgctgt gcaacctgtt cggtagcca aagcgcgtgg cgatgggcat ggggcaggaa	240
gatgtttcgg cgctgcgtga agttggtaaa ttattggcgt ttctgaaaga gccggagccg	300
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gatctcaatc gcattcccat tatgacctgc tggccggaag atgccgcgcc gctgattacc	480
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cagcagctaa ttggtaaaaa caaactgatt atgcgctggc tgctgcacgc cggcggcgcg	600
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gagtatcgt ttgccggatt gctgcgcgg accaagaccg aagtgggtgaa gtgtatctcc	780
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<210> 283

<211> 1494

<212> DNA

<213> Escherichia coli

<400> 283

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cgcactttgc gtgccggtgg gcctgcgctg ttgttcgaaa accctaaagg ctactcaatg	180
ccggtgctgt gcaacctgtt cggtagcca aagcgcgtgg cgatgggcat ggggcaggaa	240
gatgtttcgg cgctgcgtga agttggtaaa ttattggcgt ttctgaaaga gccggagccg	300
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ccgacaaagc ggctgcgtgg tgcgccctgc caacaaaaaa tcgtctctgg cgatgacgtc	420
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<210> 284

<211> 1479

<212> DNA

<213> *Salmonella enterica* subsp. *enterica* serovar Typhi

<400> 284

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 gaactaaac gcatcacgct acctgtggat cctcatctgg aaatcacgga aatcgctgac 120
 cgcacgctgc gtgccgggtg accggcggtg ctgtttgaaa atcctaaagg ttacgccatg 180
 ccggtgctgt gcaacctttt tggcacgcca aaacgcgtgg cgatgggcat ggggcaggat 240
 gatgtttccg ccttacggga agtgggtaaa ttattagcgt ttctgaaaga acctgagccg 300
 ccgaaaggct ttgcgatct gtttgacaag ctgccgcagt ttaagcaagt gctgaatatg 360
 ccgacgaaac ggttacgcgg cgcgccttgc cagcagaaaa tcgcgtctgg cgatgatgtc 420
 gatttaacgc gtcttctgt catgacctgt tggccggacg acgccgcgcc gctgattacc 480
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 cagcagttga taggtaaaaa taagctgatt atgcgtggc tgtctcaccg cggcggcgcg 600
 ttggattttc aggagtgggt agccgcgcgt ccgggtgaac gtttcccggc ctccgtcgca 660
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gagatggcgc cggaaggacc gtatggcgat catacgggct attataatga agtggataac	900
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<210> 285

<211> 1494

<212> DNA

<213> Escherichia coli

<400> 285

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ccggtgctgt gcaacttggt cggtagccca aagcgcgtag cgatgggtat gggccaggaa	240
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tgggggctaa ccgttacacg tggccctcat aaagagcgac agaactctggg catttatcgc	540
cagcaactga ttggtaaaaa caagctgatt atgcgttggc tgtcgcatcg cggcggcgcg	600
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aatgatctcg aagtgcccg cagtgcggag attgtgctgg aagggtatat cgaacaaggc	840

gaaatggcgc cagaaggacc gtatggtgac cacactgggtt actataacga agtcgatagt	900
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<210> 286

<211> 1494

<212> DNA

<213> *Shigella flexneri*

<400> 286

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gagctaaaac gtatcacgct cccggtggat ccgcatctgg aaatcactga aattgctgac	120
cgcaactctgc gtgctgggtg gcctgcgctg ttgttcgaaa accctaaagg ctactcaatg	180
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<210> 287

<211> 1467

<212> DNA

<213> *Pseudomonas aeruginosa*

<400> 287

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cgcgccaagg gcccgccatt gctgttcgaa aagccgaccg gcttcgacat gccggtgctc 180
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 ctctggtcga gcctcgggat cgactga 1467

<210> 288

<211> 1467

<212> DNA

<213> *Pseudomonas syringae* pv. tomato

<400> 288

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<210> 289

<211> 1497

<212> DNA

<213> *Yersinia pseudotuberculosis*

<400> 289

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<210> 290

<211> 1485

<212> DNA

<213> *Neisseria meningitidis* serogroup B

<400> 290

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gtgctgcgtg ccgaagggcc ggcgttgctg tttgaaaacc cgattaagcc cgacggtacg	180
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<210> 291
 <211> 1479
 <212> DNA
 <213> *Neisseria gonorrhoeae*

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<210> 292
 <211> 1497
 <212> DNA
 <213> *Yersinia pestis*

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<210> 293

<211> 1653

<212> DNA

<213> *Pseudomonas putida*

<400> 293

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 gatgagctgt gggatcagtt gggaatagat tga 1653

<210> 294
 <211> 587
 <212> DNA
 <213> *Serratia marcescens*

<400> 294
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<210> 295

<211> 1560
 <212> DNA
 <213> Burkholderia mallei

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<210> 296
 <211> 1560
 <212> DNA
 <213> Burkholderia pseudomallei

<400> 296
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<210> 297

<211> 1545

<212> DNA

<213> Bordetella parapertussis

<400> 297

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<210> 298
 <211> 1545
 <212> DNA
 <213> Bordetella bronchiseptica

<400> 298	
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<210> 299
 <211> 1560
 <212> DNA
 <213> Bordetella pertussis Tohama

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<210> 300

<211> 1467

<212> DNA

<213> Legionella pneumophila subsp. pneumophila str. Philadelphia

<400> 300

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<210> 301
 <211> 598
 <212> DNA
 <213> *Klebsiella pneumoniae*

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cgatttccgg gaactgcttt tgcaggatcg gcacaaagac ttcatcagc gccacgcca	180
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<210> 302
 <211> 578
 <212> DNA
 <213> *Serratia liquefaciens*

<400> 302	
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<210> 303
 <211> 1320
 <212> DNA
 <213> *Brucella melitensis*

<400> 303	
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<210> 304
 <211> 1425
 <212> DNA
 <213> Haemophilus influenzae

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<210> 305
 <211> 1425

<212> DNA
 <213> *Pasteurella multocida*

<400> 305
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<210> 306
 <211> 1428
 <212> DNA
 <213> *Haemophilus ducrei*

<400> 306
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<210> 307
<211> 1425
<212> DNA
<213> *Vibrio parahaemolyticus*

<400> 307

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<210> 308
 <211> 1473
 <212> DNA
 <213> *Yersinia pestis*

<400> 308	
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<210> 309

<211> 1216

<212> DNA

<213> *Vibrio cholerae*

<400> 309

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<210> 310
 <211> 1424
 <212> DNA
 <213> Escherichia coli

<400> 310	
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<210> 311
 <211> 1425
 <212> DNA
 <213> Escherichia coli

<400> 311	
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<210> 312
 <211> 1560
 <212> DNA
 <213> *Pseudomonas aeruginosa*

<400> 312	
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<210> 313
 <211> 1344
 <212> DNA
 <213> Bordetella pertussis

<400> 313	
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<210> 314
 <211> 1428
 <212> DNA
 <213> Bordetella parapertussis

<400> 314	
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<210> 315
 <211> 1374
 <212> DNA
 <213> Burkholderia pseudomallei

<400> 315
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<210> 316

<211> 1425

<212> DNA

<213> *Vibrio vulnificus*

<400> 316

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<210> 317
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 <212> DNA
 <213> *Vibrio fischeri*

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 <211> 1425
 <212> DNA
 <213> *Yersinia pseudotuberculosis*

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<210> 319

<211> 1467

<212> DNA

<213> *Salmonella enterica* subspecies *paratyphi* A

<400> 319

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<210> 320
 <211> 1425
 <212> DNA
 <213> Salmonella typhimurium

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 <211> 1425
 <212> DNA
 <213> *Shigella flexneri*

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<210> 322
 <211> 1329
 <212> DNA
 <213> *Pseudomonas syringae*

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 <213> Burkholderia mallei

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 <211> 1344
 <212> DNA
 <213> Legionella pneumophila

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gatagcggca atataatgaa ttaacagggc aagatcggct atatcccat tgtccataat	720
acctctgtaa tcgttcacat tttggcctag taaattaatc tctctgacgc cttgactggc	780
taattgataa cactcagcca atacatcatc aaatggtctg ctgatttctt cgccacgggt	840
gtagggcacc acacagaagc tgcaatattt actacagcct tccattatag atacaaaagc	900
tgtagggcct tctgctcttg gtgcgggtaa atgatcaaat ttctctattt ctggaaagct	960
gatatcaaca acagatttat ttttctcaag cctttcattg agcagggcag ggagcctgtg	1020
taatgtctgt ggcccaaata cgatatcaac aaacggtgct ctttttatga tgtctgagcc	1080
ttcttggtc gctacgcac ctcccactcc aatgagcaca tgagggtttt tggctttata	1140
ttctcgccat tgaccagtt gagaaaaaac ttttctctgt gctttttctc gaattgagca	1200

tgtgtttaat aaaataacat cggcatcctc gacttgatca gttttgacca aaccatggga	1260
agcgtaaagt acttctgcca ttttagaaga atcgtattca ttcatttggc agccatttgt	1320
tttaatatat aattttttaa ccat	1344

<210> 325
 <211> 1428
 <212> DNA
 <213> Bordetella bronchiseptica

<400> 325	
tcattcggct ccggatgtgt cgcgttcgat gccggcgaca cggccgcgca gcgagttggt	60
gtgggcgtgg gtgacgacga cgtcgaccat gtggccgatc aggcgcggca cgccgggaaa	120
gttgacgata cggttgttct cgttacggcc catcagctcg ttggggtcgc gccgcgaagg	180
gccttcgacc agcacgcgct ggcgggtgcc gatcatgccc tgggcgatgg ccgcggcctg	240
ctggttgatg agcgccctgca actgctgcag gcggcgcagc ttgacgtcct gcggcgtgtc	300
atcgtgcagg tcggcggccg gcgtgccggg ccggcgcgaa tacacgaacg agaacgaggt	360
gtcgaagccg acgtcctcga tcagcttcat ggtcttcttg aagtcctcct cggctctgcc	420
cgggaaaccg acgatgaagt ccgaggacag cgtcaggctg gggcgcgcag cgcgcaggcg	480
gcgcaccacg gacttgaact ccagcgcggt gtagccgcgc ttcattggccg ccagcaccgc	540
gtcgctgccg gcctgcaccg gcaggtgacg gaacgacacc agcttgggca gccgtgcgta	600
ggcgctgacc atgcgctggg tcatttcctt cggatgcgag gtcgtgtagc ggatccgttc	660
gataccggga atctcgtgca cgtattccag cagcatggcg aaatcggcga tttcgccgct	720
gtcgcccatg gcgcgcggt aggcgttgac gttctggccc agcagcgtga cttccttgac	780
gccctggctg gccaggtcgg cgacctcgag caggacgtcg tcgaagggcc gcgacacttc	840
ttcgccgcgc gtgtagggca ccacgcagaa gctgcaatac ttgctgcagc cttccatgat	900
ggacacgaac gcggtggcgc cgtcgacgcg cggcgggggc agggcgtcga acttctcgat	960
ctcgggaaag ctgatgtcga cctgcgacac gccctgggcg cggcggcgct tgatcaggtc	1020
gggcagccgg tgcagggtct gcgggccgaa caccacgtcg acatagggcg cgcgcttgac	1080
gatggcctcg ccctcctggc tggccacgca gccgcccacg ccgatcacca gggtgggggt	1140
ctgcttcttg aggtgctgta ccgggccag gtcggagaac accttctcct gcgccttctc	1200
gcgcacggaa cagggtgtga acaggatgac atcggcatcc tcggggttgt cggtcagctc	1260
caggccctgg tcggcgcgca gcacgtcggc catcttgtcc gagtcgtact cgttcatctg	1320

gcagccgaag gtgcggatat acaatttgcc caggccctgg gcggtggtgg ccggcgtgcc 1380
ggcatcggac gggctggcgc cgtcgcgttt gacagtgggt tcttgcat 1428

<210> 326
<211> 597
<212> DNA
<213> Enterococcus faecalis

<400> 326
ctatttgaag ggcgcaagggt gtcattgttg atatcgatca aggaacctat ccatttgtta 60
cttctcttaa tccagtagct ggtggcgtaa ctatcggtag tggcgttggt ccatcaaaaa 120
ttaataaagt ggttggtgtc tgcaaagcgt acacttcacg tgtcgggtgac ggcccattcc 180
caacagaatt atttgatgaa acaggagaaa ccattcgtcg tgtcggtaaa gaatacggaa 240
caacaacagg acgtccgcgt cgtgtcgggt ggtttgattc agtagtcatg cgtcattcaa 300
aacgtgtatc agggattaca aacttgtcat taaactcgat tgacgtgtta agtggtttag 360
aaacggtgaa aatttgtaca gcttatgaac ttgatgggtga attaatattat cattatccag 420
caagcttgaa agaattaagc cgctgtaaac cagtttatga agaattacca ggttggtctg 480
aagatatcac tgggtgcaaa actttagccg atttaccagc taatgctcgt aactatgtgc 540
atcggatttc agaattagtt ggtgtgcgca tttcaacatt ctacgtaggg ccagacc 597

<210> 327
<211> 597
<212> DNA
<213> Enterococcus gallinarum

<400> 327
ctcttcgagg tgcgcaagga gttatgctag atattgatca aggaacatat ccgttcgtaa 60
catcctcaaa tccagtagct ggtggagtaa ccattggtag tggagtgggt ccttctaaaa 120
tcaataaagt agttggtgtt tgtaaagcat atacttcaag agttggtgac ggcccattcc 180
caacagaact ttttgatgaa acaggcaatc aaattcgtga agttggccgt gaatatggta 240
cgacaactgg tcgtccacgt cgtgttggtt ggtttgactc tgttgatcatg cgtcattcaa 300
aacgtgtttc tggatcacg aatctgtctt taaattcaat tgatgttttg agcggcttgg 360
aaactgtaaa aatttgtact gcttatgaat tagatggaga attgatttat cattatcctg 420
caagtctaaa agaattgaat cgttgtaaac cagtctatga agagttacca ggctggtcag 480
aagatattac tggatgcaaa acattagctg atcttcctga aaatgcacgt aactatgtac 540
atcgtatctc tgaattagtt ggggttcgta tctcaacatt ctacgtaggt cctgacc 597

<210> 328
 <211> 598
 <212> DNA
 <213> *Enterococcus flavescens*

<220>
 <221> misc_feature
 <222> (594)..(594)
 <223> n is a, c, g, or t

<400> 328
 ctttttgaag gtgctcaagg cgtgatgctg gatatcgacc aaggaaccta tcctttcgtg 60
 acatcatcca accccgttgc tgggggagtc actattggtg gtggtgtggg tccttcaaaa 120
 atcaacaaag tcgttggtgt ctgcaaagct tacacctctc gggtaggaga tggtcctttc 180
 coaacggaac tgtttgatga aacaggtgaa caaatccgta agatcggtcg tgaatacggg 240
 acaacgacag gacgtcctcg ccgtgtgggc tggtttgata ccgtcgtgat gcgccattca 300
 aaacgtgttt cagggattac aaacctatcc ctttaactcga tcgatgtctt gagcggctta 360
 gaaaccgtga agatctgtac ggcttatgaa ctagacggcg aattgatcta tcattaccca 420
 gcaagcttga aagagttgaa ccgctgcaaa ccagtctacg aagaacttcc tggctgggtc 480
 gaagacatta ctggctgcaa aacattagca gatctgccag aaaatgcacg caattacggt 540
 caccgcatct ctgaattagt cgggtgtccgc atttcgacct tctcagtagg gccngacc 598

<210> 329
 <211> 598
 <212> DNA
 <213> *Streptococcus agalactiae*

<220>
 <221> misc_feature
 <222> (581)..(581)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (591)..(591)
 <223> n is a, c, g, or t

<400> 329
 ctctttgaag ggcgcaagga gttatgctcg acattgatca aggaacatac ccatttgtaa 60
 catcttccaa tccagtagca ggtggtgtca caattgggtc gggagttgga ccaagtaaaa 120
 ttaataaagt agtaggtgta tgtaaagctt acactagccg tgttggtgat ggaccattcc 180

caacagaact ttttgatgag gttggtgacc gtattcgtga gattggtaaa gagtatggta	240
caacgaccgg tcgtcctcgt cgcgttggat ggtttgattc tgttgttatg cgtcacagcc	300
gtcgagtatc aggtattact aacctctctc tgaattcaat tgatgttctt tcagggcttg	360
atacggtgaa aatttggtg gcttatgacc ttgatgggaa acgtattgac tattaccag	420
caagccttga acagctaaaa cgttgtaaac caatctatga agaattaccg ggctggctctg	480
aagatattac agcttgctgt agcttagatg atcttccaga aaatgcacgt aattacgttc	540
gccgtgttg cgaattggtt ggtgttcgta tttctacttt nctcagtagg nccaggtc	598

<210> 330
 <211> 599
 <212> DNA
 <213> Streptococcus sanguis

<400> 330	
ctttttgaag gggctcaagg agttatgctc gacattgatc aaggaacata cccatttgta	60
acatcttcca atccagtagc aggtggtgct acaattggtt cgggagttgg accaagtaaa	120
attaataaag tagtaggtgt atgtaaagct tacactagcc gtggttggtga tggaccattc	180
ccaacagaac tttttgatga ggttggtgac cgtattcgtg agattggtaa agagtatggt	240
acaacgaccg gtcgtcctcg tcgcgttggg tggtttgatt ctggtgttat gcgtcacagc	300
cgtcgagtat caggtattac taacctctct ctgaattcaa ttgatgttct ttcagggctt	360
gatacggtgaa aaatttggtg ggcttatgac cttgatggga aacgtattga ctattacca	420
gcaagccttg aacagctaaa acgttgtaaa ccaatctatg aagaattacc gggctggctc	480
gaagatatta cagcttgctg tagcttagat gatcttccag aaaatgcacg taattacgtt	540
cgccgtgttg gcgaattggt tgggtgtcgt atttctactt tctcagttgg gtccagacc	599

<210> 331
 <211> 598
 <212> DNA
 <213> Enterococcus faecium

<220>
 <221> misc_feature
 <222> (581)..(581)
 <223> n is a, c, g, or t

<400> 331	
ttcttcgaag gggcgcaagg ggttatgctg gatattgacc aagggactta tccatttgta	60

acttcttcta atccagttgc aggggagtc ccatcggttc cgggtgttggc ccgagcaaaa	120
ttgacaaggt agttggtgtc tgcaaggcct acaccagtcg ggtcggagat ggaccattcc	180
caacagagct ttttgatgaa gttggtgacc gcattcgtga tatcggccac gaatatggca	240
ctaccactgg tcgcccacgt cgggtaggtt ggtttgactc ggttgttatg cgccatagcc	300
gccgtgtatc agggattacc aatctttcgc ttaactccat cgatgtcttg agtgggtctgg	360
atacagtga aatctgtgta gcttatgact tggatggcca aagaatcgac cactaccag	420
ctagtctgga acagctcaag cgctgcaagc cgatttacga agagctgcca ggctggtcag	480
aggacatcac tggagtcgc agtctggaag acttgccaga aaatgcccg aactatgttc	540
gccgagtga tgagctggtt ggcgttcgca tttctacctt nctcagtagg gccagacc	598

<210> 332
 <211> 598
 <212> DNA
 <213> *Enterococcus durans*

<400> 332	
ctctttgaag gggcacaagg tgtgatgttg gatatcgatc aaggaacgta tccatttgtg	60
acttcttcta atccggtagc tgggtggtgta acgatcggta gtggcgttgg cccttcaaag	120
atcaataaag tcgttggtgt atgtaaagct tatacttctc gtgtaggaga tggcccattc	180
ccaacagaac tatttgacga aacagggtcaa caaatccgtg aagtcggtcg tgaatatggt	240
acgacaacag gtcgacctcg tcgtgtcggg tggtttgata cagtcgtggg gcgccattca	300
aaacgtgtat caggaatcac taacctatca ttgaattcaa tcgatgtatt aagcggacta	360
gaaacagtaa aaatctgtac agcgtatgaa ttagatggag aattgatcta tcattaccca	420
gcaagcctga aagaattgaa acgttgcaaa ccagtatacg aagaacttcc tggttggtct	480
gaagatatta cagcatgtaa aacacttgct gaactaccag aaaacgcccg taactatgtt	540
agacgtatct cagagcctgt aggagtcctg atttcaacat tctcagtagg tccagacc	598

<210> 333
 <211> 597
 <212> DNA
 <213> *Streptococcus pyogenes*

<400> 333	
ctatttgaag gggcacaagg ggttatgctt gatattgacc aggaacgtac ccatttgtaa	60
cgtcttcaaa ccagttgct ggtggtgtaa ccattgggtc tgggtgttggc ccaaataaaa	120
tcaacaaagt agttggtgtc tgtaaagcct acacaagccg tgtcggtgat gggccattcc	180

ctacagaact cttt gatgaa gtgggtgagc gcattcgtga agtgggtcat gaggtaggga	240
caacgaccgg ccgtccacgt cgtgtcgggt ggtttgattc ggttgtcatg cgccacagtc	300
gtcgtgtatc aggtattact aacctctctc tgaattcaat tgatgttctt tcagggttg	360
atacggttaa gatttgtgtg gcttatgacc ttgatgggaa acgtattgac tattaccag	420
caaaccttga acaactcaaa cgttgcaaac caatctatga agaattacca ggctggcaag	480
aggacatcac aggtgttcgt agccttgatg agcttcctga aaatgcccg c aactacgttc	540
gtcgtgttgg agaattggtt ggcgttcgca tttcaacctt ctcagttggg ccagacc	597

<210> 334
 <211> 599
 <212> DNA
 <213> Streptococcus pneumoniae

<400> 334	
ctatttgaag gggctcaagg tggtatgcta gatatcgacc aaggtagtta tccatttggt	60
acgtcatcaa accctgtagc tgggtgtgtg acaattgggt ctggtgtcgg tccaagcaag	120
attgacaagg ttgtaggtgt atgtaaagct tatacgagtc gtgtaggaga tggctcctttc	180
ccaactgagt tgtttgatga agtgggagaa cgtatccgtg aagtgggtca tgaatatggt	240
acaacaactg gtcgtccacg tcgtgtaggt tggtttgact cagttgtgat gcgtcatagc	300
cgctcgtgtt ctggtattac taacctttct ttgaactcta ttgatgtttt gagcgggttg	360
gatactgtga aaatctgtgt ggcctatgat cttgacggtc aacgtattga ctactatcca	420
gctagtcttg agcaattgaa acgttgcaag cctatctatg aagagttgcc aggttggtca	480
gaagatatta ccggagttcg caatttgga gatcttcctg agaatgcgcg taactatggt	540
cgctcgtgtga gtgaattggt tggcgttcgt atttctactt ttctcagtag gtccaggcc	599

<210> 335
 <211> 598
 <212> DNA
 <213> Streptococcus oralis

<400> 335	
cttttcgaag gtgcgcaagg tgtcatgttg gacattgatc aagggaactta tccatttggt	60
acttcttcaa accctgtcgc tgggtgtgtg acgattgggt ctggtgttgg tccaagtaag	120
attgacaagg ttgtaggtgt ctgtaaagcc tacacaagtc gtgtaggaga tggaccgttc	180
ccaactgaat tatttgatga agtgggagat cgcacccgtg aagtaggtca tgaatatggt	240

acaacaactg gtcgtccacg tcgtgtgggt tggtttgact cagttgtgat gcgtcacagc	300
cgccgtgtat ctgggattac caatctttca ttgaactcta tagatgtttt gagtgggttg	360
gatactgtga aaatctgtgt cgcctatgat cttgatggtc aacgtattga ttactatcct	420
gctagtcttg agcagttgaa acgttgtaag ccaatctacg aggaattgcc aggttggtca	480
gaagacatca ctggagtcg taatttgaa gaccttcctg agaatgcacg caactatggt	540
cgtcgtgtaa gcgagttggt tgggtgtcgt atctcaactt tctcagttgg gccagatc	598

<210> 336
 <211> 598
 <212> DNA
 <213> *Staphylococcus hominis*

<400> 336	
ctctttgaag gagcgcaagg agttatgtta gatatcgacc atggtacata tccttttgta	60
acgtcaagta atcctgtggc aggtaatgtg acagtaggaa ctggcgtggg tccaaccttc	120
gtatctaaag tgattgggggt atgtaaatcc tatacatctc gtgtaggtga cggcccattc	180
cctactgaat tattcgacga agatgggcat catattagag aagtaggtcg tgaatatgga	240
acgacaacag gacgtcctcg tcgtgtaggt tggttcgact cagttgtatt acgtcactct	300
cgtcgtgtaa gtggatttac agacttatct attaactcaa ttgacgtttt aacagggtta	360
gatacgggta aaatttgtag agcttatgag ttagatgggtg aaacaatcac agaatatcca	420
gcaaacttag accaattacg tcgttgtaaa ccaattttcg aagagttacc tggttggacg	480
gaagacatta caggttgtcg tacattagaa gaattacctg aaaacgcacg taaatactta	540
gaacgtattt ctgaattatg tggcgttcat atttcaatct tctcagtagg tccaggcc	598

<210> 337
 <211> 598
 <212> DNA
 <213> *Bacillus anthracis*

<400> 337	
ctatttgaag gtgctcaagg tggtatgctt gatatcgacc acggtacgta cccgttcggt	60
acatcttcta acccaattgc tgggtgggtga acagttggaa ctggagttgg tcctgcgaaa	120
gttactcgcg ttgtaggtgt atgtaaagca tatacaagcc gcgttggtga tgggccattc	180
cctactgagc ttcattgacga aattgggcat caaatcgtg aagttgggtcg tgagtatgga	240
acgacaactg gtcgtccacg ccgcgtaggt tggttcgata gcgttggtgt aagacatgca	300
cgtcgtgtta gtgggttaac agatttatca ttaaactcta tcgacgttct aactgggtatt	360

ccaacactta aaatttgtgt tgcttacaaa tgcgatggga aagttatcga tgaagttcca	420
gcaaacttaa acatttttagc gaaatgtgag cctgtatacg aagagcttcc aggttggaca	480
gaagatatta ctggtgtaag atcattagat gagcttcctg aaaatgctcg aaaatacgta	540
gaacgtgttt ctgagttaac aggagttcaa ttatctatgt tctcagtagg gccagacc	598

<210> 338
 <211> 562
 <212> DNA
 <213> *Bacillus cereus*

<220>
 <221> misc_feature
 <222> (4)..(4)
 <223> n is a, c, g, or t

<400> 338	
gacncggtac gtaccggttc gttacatctt ctaacccaat tgctggtggt gtaacagttg	60
gaactggagt tggctcctgcg aaagttactc gcgttgtagg tgtatgtaaa gcatatacaa	120
gccgcgttgg tgatggtcca ttccctactg agcttcatga tgaaattggt catcaaattc	180
gtgaagttgg tcgcgagtat ggaacgacaa ctggtcgtcc acgccgcgta gggtgggtcg	240
atagcgttgt tgtaagacat gcacgtcgtg ttagtggttt aacggatcta tcattaaatt	300
ctatcgacgt tttaacaggt attccaactc ttaaaatttg tgtagcttac aaatacaatg	360
gcgaagttat tgatgaagtt ccagctaact taaacatttt agcgaaatgt gagcctgtat	420
atgaagagct tccaggttgg gaagaagata ttactggtgt aaaatcatta gatgaacttc	480
ctgaaaatgc acgaaaatac gtagaacgtg tttctgagtt aacaggaatt caaatatcta	540
tgttctcagt aggtccccac ca	562

<210> 339
 <211> 598
 <212> DNA
 <213> *Bacillus megatherium*

<400> 339	
ctattcgaag gggcacaagg tgttatgtta gatatcgatc aaggaacata tccatttggt	60
acatcttcaa acccagtagc gggtaggagta acaattgggt ctggggtagg tccatctaaa	120
atcaaacacg ttgtaggtgt atcaaaagcg tatacaactc gtggttggtga cggccctttc	180
ccaactgaat taacaaacga aatcgggtgat caaatccgtg aagtaggacg tgaatatggt	240

acaacaactg gtcgtcctcg ccgtgtaggt tggttcgaca gtgtagttgt acgtcatgct	300
cgtcgcgtta gtggaatcac agatctatct ttaaactcaa ttgatgtatt aacgggaatt	360
gagacattaa agatttgcgt agcttatcgt tataaagggg aagttatgga agaattccct	420
gctagcttaa aaacacttgc agagtgcgaa cctgtatatg aagagcttcc aggttggaca	480
gaagatatta cgggtgtgaa aacattagat gagttacctg ataacgctcg ccactactta	540
gagcgcgtgt ctcaattaac aggtattcct ttatctatct tctcagtagg tccaggcc	598

<210> 340
 <211> 598
 <212> DNA
 <213> *Enterococcus casseliflavus*

<220>
 <221> misc_feature
 <222> (11)..(11)
 <223> n is a, c, g, or t

<400> 340	
tattcgaagg nagctcaagg cgtgatgctg gatatcgacc aaggaaccta tcctttcgtg	60
acatcatcca acccgttgc tggaggtgct accatcggtg gtggtgtggg tccttcaaaa	120
atcaacaaag tcgttgggtgt ctgcaaagct tacacctctc gggtaggaga tggctccttc	180
ccaacggaac tgtttgatga aacaggtgaa caaatcgtg agatcggtcg tgaatacgga	240
acaacgacag gacgtcctcg ccgtgtgggc tggtttgata ccgtcgtgat gcgccattca	300
aaacgggtct cagggatcac gaatctatcc cttaactcga tcgatgtctt gagcggctta	360
gaaaccgtga agatctgtac ggcttatgaa ctagacggcg aattgatcta tcattaccca	420
gcaagcttga aagagttgaa ccgctgcaaa ccagtctacg aagaacttcc tggctgggtct	480
gaagacatta ctggctgcaa aacattagca gatctgccag aaaatgcacg caattacggt	540
caccgcatct ctgaattagt cgggtgtccgc atttcgacct tctcagtagg tccagacc	598

<210> 341
 <211> 598
 <212> DNA
 <213> *Enterococcus raffinosus*

<400> 341	
ctatttgaag gtgctcaagg cgttatgctg gatattgatc aaggaaccta tccatttggt	60
acttcttcga acccagttgc cgggtggggtg actatcggtg gtggtgtagg acctgctaaa	120
atcgacaaaag ttgtcgggtgt ttgtaaagcc tatacttcac gcgtaggtga tggaccttct	180

ccaactgaat tgtttgatga agttggagat cagattcgtg aagtcggtcg tgaatatgga	240
acgactactg gtcgtccacg tcgtgtgggc tggtttgact cggttgtgat gcgtcattca	300
aaacgtgttt ctgggattac gaatctttct ttaaactcga ttgatgtctt gagcgggtctg	360
gatacagtga aaatttgtac agcgtatgag ctggacggag aactaattta ccattatcca	420
gcaagcctaa aagaattaaa tcgttgtaag cccgtttatg aagaactacc tggttggagc	480
gaagatatta caggctgccg tgatttagct gatctaccgg aaaatgcgcg taattatgta	540
cgtcgcgttt ctgaacttgt ggggtgtgcgt atctcgacct tctcagttgg tcctggtc	598

<210> 342
 <211> 598
 <212> DNA
 <213> *Staphylococcus aureus*

<400> 342	
ctatttgaag gggcacaagg tgtaatgtta gatatcgacc atggtacata tccattcggt	60
acatcaagta atccaattgc aggtaacgtt actgttggtta cagggtgtagg tcctacattc	120
gtttcaaagg taattggtgt atgtaaagct tatacatcac gtgttggtga tgggccattc	180
cctactgaat tattcgatga agatggacat catattagag aagttggtcg tgaatatggt	240
acaacaacag gacgtccacg tcgtgtaggt tggtttgatt cagttgtatt acgtcactct	300
cgtcgtgtaa gtggtattac agatttatct attaaactcaa tcgatgtttt aacaggccta	360
gacacagtga aaatctgtac agcttatgaa ttagacggta aagaaattac tgagtaccca	420
gcaaacttag atcaattaaa acgttgtaaa ccaatctttg aagagttacc aggttggaca	480
gaagacgtaa caagtgtgcg tacttttagaa gaattacctg aaaatgcacg taaatattta	540
gagcgtattt cagaattatg taatgtacaa atttctatct tctcagtagg tccaggcc	598

<210> 343
 <211> 598
 <212> DNA
 <213> *Staphylococcus epidermidis*

<400> 343	
ctcttcgaag gtgctcaagg tgatcatgtta gatatcgacc atggtacata tccattcggt	60
acatctagta atccagttgc aggtaacgtt acagtaggta cagggtgttg ccctacatca	120
gtgtctaaag tgattggtgt atgtaaatca tatacatctc gtgtaggtga cgggccattc	180
ccaactgaac tttttgatga agatggccac catattagag aagtggttcg tgaatatggt	240

acaactactg gacgtccacg tcgtgtaggt tggttcgact cagttgtatt acgtcattca 300
 cgtcgtgtaa gtggtatcac agatctttca attaactcaa tcgacgtttt aacaggatta 360
 gacacagtta aaatttgtac tgcttacgaa ttagatggtg aaaaaattac tgaataccca 420
 gcaaacttag atcaattaag acgttgtaaa cctatcttcg aagagcttcc aggttggact 480
 gaagacatta caggttgctg tagtttagat gaacttctcg agaatgcacg taattactta 540
 gagcgtattt cagaattatg cggtgtccat atttcaatct tctcagtagg tcctgggc 598

<210> 344
 <211> 567
 <212> DNA
 <213> *Streptococcus mitis*

<220>
 <221> misc_feature
 <222> (11)..(11)
 <223> n is a, c, g, or t

<400> 344
 tatggctagc natagaccaa ggtacgtatc catttggttac gtcacaaac cctgtggctg 60
 gtggtgttac gattggttct ggtgttggtc caagtaagat tgacaagggt gtaggtttat 120
 gtaaagccta tacgagtcga gtaggagacg gtcctttccc aactgaattg tttgatgaag 180
 tgggagaacg tatccgtgaa gttggtcatg aatatggtac aacaactggt cgtccacgtc 240
 gtgtgggttg gtttgactca gttgtgatgc gtcatagtcg tcgtgtttct ggtattacta 300
 atctttcatt gaactctatc gatgttttga gtggtttaga tacagtgaag atctgtgtgg 360
 cctatgatct tgatgggtcaa cgtattgact actatccagc tagtcttgag caattgaaac 420
 gttgcaagcc tatctatgaa gagttgccag gttggtcaga agatattact ggagttcgta 480
 atttggaaga tcttctgag aatgcgcgta actatgttcg tcgtgtgagt gaattggttg 540
 gcgttcgtat ttctactttc tcagtag 567

<210> 345
 <211> 572
 <212> DNA
 <213> *Streptococcus species*

<400> 345
 atggcttgct attgaccaag ggtacatacc catttgtaac atcatctaac ccagtcgctg 60
 gtggtgtaac aatcggttct ggtgttggtc caagtaaaat caacaaagtt gtcggtgtat 120
 gtaaagccta cacaagccgt gttggtgacg gaccattccc aactgaactt ttagacgaag 180

ttggtgaccg catccgtgaa gtgggtcacg aatatgggac aacaactgga cgtccacgtc	240
gtgttggttg gtttgactca gttgttatgc gtcacagccg ccgcgtatca ggtatcacia	300
acttgtcact taactcaatt gacgttcttt caggtcttga tacggtcaaa atctgtgtgg	360
catacgacct tgacggtcaa cgtatcgacc actaccagc aagccttgaa caattgaaac	420
gttgtaaacc aatctacgaa gaattgccag gttggtcaga agacatcaca ggttgccgta	480
gcctagatga acttcccgaa aatgctcgtg actacgttcg ccgtgttggt gaactcgttg	540
gtgttcgcat ttcaacattc tcagttggcc cc	572

<210> 346
 <211> 571
 <212> DNA
 <213> Streptococcus canis

<220>
 <221> misc_feature
 <222> (9)..(9)
 <223> n is a, c, g, or t

<400> 346	
tggcttgcnatcgaccaagg taacttacct atttgttact tcttcaaacc cagttgctgg	60
tggggtaaca atcggttcag gtgttggtcc aagcaagatc aataaagttg tcggtgtatg	120
taaagcttac acaagccgtg ttggtgacgg tccgttccca acagaacttc tagatgaagt	180
tggagatcgt atccgtgaaa ttggtcacga atatggtaca acaactggac gtccacgtcg	240
tgttggttgg tttgactcag ttgttatgcg tcacagccgc ccgcgtatcag gtatcacaaa	300
cttgtcactt aactcaatcg atgttctttc aggacttgat actgttaaaa tctgtgtggc	360
atacgacctt gacggtcaac gtatcgacca ctaccagca agtcttgaac aattgaaacg	420
ttgtaaacca atctacgaag aattgccagg ttggtcagaa gacatcacag gttgccgtag	480
cctagatgaa cttcccgaaa atgctcgtga ctacgttcgc cgtgttggtg aactcgttgg	540
tgttcgcatt tcaacattct cagttggccc c	571

<210> 347
 <211> 573
 <212> DNA
 <213> Streptococcus mutans

<220>
 <221> misc_feature

<222> (11)..(11)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (567)..(567)
 <223> n is a, c, g, or t

<400> 347
 tatggcttgc nattgaccaa ggtaacctat ccatttgtaa cttcatcaaa tccagttgca 60
 ggtggcggtta ccatcggtac tgggtgttga ccaagtaaaa tcaataaggt tgttggtgtc 120
 tgcaaagcct ataccagccg tgtaggtgat ggtcctttcc ccacagaact ttttgaccaa 180
 acgggagagc gcattcgtga agttgggcat gaatacggga caacaacagg gcgtccgcgt 240
 cgagttgggtt ggtttgactc agttgttatg cgtcacagcc gccgtgtatc aggcattacc 300
 aatttatctc ttaactgtat tgatgtactt tcaggtcttg atatcgtaaa aatctgtgta 360
 gcctatgatt tggatggaaa acggattgat cactaccctg ccagtctcga acaactcaaa 420
 cgctgtaaac ctatttatga agaattgccg ggctgggtctg aagatattac aggggttcgc 480
 agtttagaag atcttcctga aaatgctcgt aattatgtcc gccgtgtaag tgaattagtt 540
 ggtgttcgta tttctacttt ctcagtngtc ccc 573

<210> 348
 <211> 572
 <212> DNA
 <213> Streptococcus gordonii

<400> 348
 taatgctagc aattgaccaa ggtacctatc catttgtaac ctcatctaata ccagttgctg 60
 gtggtgtaac gatcggttct ggtgtgggtc ctagcaagat tgacaaagta gtgggtgttt 120
 gtaaagccta tacaagtcgt gttggtgatg gtcctttccc aacagagctt ttcgatgaag 180
 taggtgaccg cattcgtgag gttggtcatg agtatggtac aacaacagga cgtccgcgtc 240
 gagttggttg gtttgactct gttgttatgc gccatagccg ccgtgtatct gggattacca 300
 atctttcgtc taactctatc gatgttttga gcggtctgga tacagtcaag atctgtgtag 360
 cctatgattt ggatggccaa agaatcgacc actatccagc tagtttgga cagcttaaac 420
 gttgtaagcc gatttacgaa gagcttcctg gatgggtctga agatattact ggcgttcgta 480
 agttagaaga tcttcagaa aatgctcgca actatgttcg gcgagtaagc gagttgggtg 540
 gtgtacgtat ttccaccttc tcagttggcc cc 572

<210> 349
 <211> 571
 <212> DNA
 <213> Bacillus species

<220>
 <221> misc_feature
 <222> (18)..(18)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (565)..(565)
 <223> n is a, c, g, or t

<400> 349
 tatggcttgc aattgaacgc gtacgtaccc attcggttaca tcttctaacc cgattgcggg 60
 tgggtgtaaca gttggaactg gagttggtcc tgcgaaagtt actcgcggtg taggtgtatg 120
 taaagcatat acaagccgtg ttggtgacgg tccattccct actgaactta atgatgaaat 180
 tggatcatcaa attcgtgaag ttggtcgtga gtacggaaca acaactggtc gtccgcgccg 240
 cgtaggttgg ttcgatagcg ttgttgtaag acatgcgcgt cgtgttagtg gtttaacgga 300
 tctatcatta aattctatcg acgttttaac agatattccg actcttaaaa tttgtgttgc 360
 ttacaaatac aatggcgaag ttatcgatga agttccagca aacttaaaaca ttttagcaaa 420
 atgtgagcct gtatatgaag agcttccagg ttggacagaa gatattactg gtgtaaaatc 480
 attagacgag cttcctgaaa atgcacgaaa atacgtagaa cgtgtttctg agttaacagg 540
 aattcaatta tctatgttct cagtngtccc c 571

<210> 350
 <211> 574
 <212> DNA
 <213> Bacillus pumilus

<220>
 <221> misc_feature
 <222> (570)..(570)
 <223> n is a, c, g, or t

<400> 350
 gttatggctt gctattgatc aaggacata tccatttgtc acgtcatcta acccagtagc 60
 tggaggagtg acgattggtt ctggcgtagg accaacaana attcaacatg tggtcggcgt 120
 gtcaaaagcg tacacaacac gtgttgagga tggcccatc cgcacagaa tccatgatga 180
 aattggcgat caaatccgtg aggttggccg tgaatacggg acaacaactg gacgtccgcg 240

```

ccgtgttggc tggtttgaca gtgtcgttgt ccgtcatgct cgacgtgtga gcgggattac 300
agatctatct cttaactcaa ttgatgtact gacagggatt gaaacattga aaatctgtgt 360
cgcttataaa ttgaacggag aaatcacaga ggaattccca gcaagtctaa atgaactagc 420
gaaatgtgag cctgtctacg aagaaatgcc aggatggaca gaggatatta caggcgtgaa 480
gaatttaagc gaactgcctg aaaatgcccgc tcattattta gagcgcattt cacaattaac 540
aggattacca ctttccattt tctcagttgn cccc 574

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<210> 351
<211> 560
<212> DNA
<213> Enterococcus villorum

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<220>
<221> misc_feature
<222> (557)..(557)
<223> n is a, c, g, or t

```

```

<400> 351
tatcgaccag ggacatatcc atttggttact tcttccatcc agtagcaggt ggtgtaacaa 60
ttggtagtgg cgttggtcca tctaaaatta ataaagtcgt cggagtatgt aaagcttata 120
cttctcgtgt tggagatggc ccgttcccta cagaattatt tgatgaaaca gggcaacaaa 180
tacgtgaagt aggtcgtgaa tatggcacia caacaggctg tccacgacga gttggatggt 240
ttgatacggg tgttatgcgc cattcaaaac gtgtatcagg tattacaaat ttatctctta 300
attcgattga tgtattaagc ggattagaaa cagtaaaaat ttgtacggcc tatgaactag 360
atgggtgagct gatttatcat taccagcaa gtttgaaaga attgaaacgt tgtaaaccag 420
tatatgaaga actacctgga tgggtctgaag atattacgaa atgcaagaca ctttctgaat 480
tgccagaaaa tgcacgtaac tatgtaagac gtatttctga gcttgtaggt gtacgcatct 540
ccacatttct cagtggcccc 560

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<210> 352
<211> 563
<212> DNA
<213> Bacillus thuringensis

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<220>
<221> misc_feature
<222> (2)..(2)
<223> n is a, c, g, or t

```

```

<220>
<221> misc_feature
<222> (555)..(555)
<223> n is a, c, g, or t

<400> 352
cncggtacgt acccggttcgt tacatcttct aacccgattg cgggtggtgt aacagttgga      60
actggagttg gccctgcgaa agttactcgc gttgtaggtg tatgtaaagc atatacaagc      120
cgtggttggtg acggtccatt ccctactgaa cttaatgatg aaattggtca tcaaattcgt      180
gaagttggtc gtgagtagcg aacaacaact ggtcgtccgc gccgcgtagg ttggttcgat      240
agcgttggtg taagacatgc gcgtcgtggt agtggtttta cggtatctatc attaaattct      300
atcgacgttc taacagatat tccaactctt aaaatttggt ttgcttaca atacaatggc      360
gaagttatcg atgaagttcc agcaaactta aacatttttag cgaaatgtga gcctgtatat      420
gaagagcttc caggttggac agaagatatt actggtgtaa aatcattaga cgagcttcct      480
gaaaatgcaa gaaaatacgt agaacgtggt tctgagttaa caggaattca attatctatg      540
ttctcagtggt ccccnngggcc cca                                             563

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<210> 353
<211> 555
<212> DNA
<213> Bacillus mycoides

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<220>
<221> misc_feature
<222> (4)..(4)
<223> n is a, c, g, or t

```

```

<220>
<221> misc_feature
<222> (548)..(548)
<223> n is a, c, g, or t

```

```

<400> 353
ggtncgtacc cattcggttac atcttctaac ccgattgctg gtggtgtaac agttggaact      60
ggagttggtc ctgcgaaagt tactcgcggt gtaggtgtat gtaaagcata tacaagccgt      120
gtaggtgatg gtccgttccc tactgagctt catgatgaaa ttggatcatca aattcgtgaa      180
gttggtcgtg aatacggaac aacaactggt cgtccacgcc gcgtaggttg gttcगतatgc      240
gttggtgtaa gacatgcacg tcgtgttagt ggtttaacag atctatcatt aaattctatc      300
gacgttctaa caggtattcc aactcttaaa atttgtgttg cttacaaata caatggcgaa      360

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gttatcgatg aagttccagc aaacttaaac attttagcga aatgtgagcc tgtatatgaa 420
gagcttccag gttggacaga agatattact ggtgtaagag cattagacga gcttcctgaa 480
aatgcacgaa aatacgtaga acgtgtttct gagttaacag gaattcaatt atctatgttc 540
tcagtgncc cccgg 555

<210> 354
<211> 581
<212> DNA
<213> Bacillus weihennstephanensis

<220>
<221> misc_feature
<222> (8)..(8)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (14)..(14)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (473)..(473)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (564)..(564)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (576)..(577)
<223> n is a, c, g, or t

<400> 354
tttttttngg aagngcgcaa ggtggtatgc ttgatatcga ccacggtaag taccogttcg 60
ttacatcttc taacccaatt gctggtggtg taacagttgg aactggagtt ggtcctgcga 120
aagttactcg cgttgtaggt gtatgtaaag catatacaag ccgtggtggt gatggtccat 180
tcctactga acttaatgat gaaatcggtc accaaattcg tgaagttggt cgtgaatacg 240
gaacaacaac gggtcgtcca cgccgtgtag gttggttcga tagcgttggt gtaagacatg 300
cacgtcgtgt tagtggttta acagatttat cattaaactc tatcgatgta ttaacaggta 360
ttccaactgt taaaatttgt gttgcttaca aatgcaatgg cgaagttatc gatgaagttc 420
cagctaactt aaacatttta gcgaaatgtg agcctgtata tgaagagctt ccnggttgga 480

cagaagatgt tactgctgtg aaatcattgg atgagcttcc tgaaaatgca agaaaatacg 540
tagagcgtgt tttctgaatt aacnggaagc caattnncaa g 581

<210> 355
<211> 572
<212> DNA
<213> Staphylococcus haemolyticus

<400> 355
caaggtgtca tgtagatat cgaccatggg acatatcctt tcgtaacttc aagtaaccct 60
gttgcaggta atgtaacagt tggtagcagg gtaggcccaa ctttcgtatc taaagtgatt 120
gggtgtatgta aagcatatac atctcgtgta ggcgatgggc cattccctac agaattatct 180
gatgaaaatg gacatcatat tagagaagtt ggtcgtgaat acggtacaac aacaggacgt 240
ccacgtcgtg taggttggtt tgactcagtt gtattacgtc actctcgtcg tgtagtggt 300
attacagact tatctattaa ctctatcgac gtacttacag gtcttgatac agtgaagatt 360
tgtactgctt acgaattaga tggagaagaa attacagaat atcctgctaa cttagatcaa 420
ttacgtcgtt gtaaaccaat ctttgaagag ttaccaggat gggaagaaga tatcactggt 480
tgccgtacat tagaagaatt accagataac gcacgtaaat acttagaacg catttctgaa 540
ttatgtaatg tacgtatttc aatcttctca gt 572

<210> 356
<211> 578
<212> DNA
<213> Staphylococcus saprophyticus

<400> 356
gcaaggtgtg atgttagata tcgaccatgg tacatatcca ttcgttcatc aagtaaccca 60
gttgcaggta atgtgactgt cggtggcggg gtaggtccaa cattcgtctc taaagttatc 120
gggtgtgtgta aagcctatac atcacgtgtc ggcgatgggc cattcccaac agaactatct 180
gacgaagatg ggcaccacat ccgtgaagta ggtcgtgaat acggtacaac aacaggacgt 240
ccacgtcgtg taggttggtt cgactcagtt gtattacgtc attctcgtcg tgcaagtggg 300
attacagatt tatctattaa ctcaattgat gtattaacag gccttaaaga agttaaaatc 360
tgtactgctt atgagttaga cggtaaagaa attacggaat acccagctaa cttgaaagac 420
ttacaacgtt gtaagccaat ttttgaagaa ttaccagggt ggacagaaga tgtgacagggt 480
tgtcgttcat tagaagaatt acctaataat gcgcgtagat acttagaacg tatttctgaa 540
ttatgtgacg tgaagatttc aatcttctca gttggccc 578

<210> 357
 <211> 583
 <212> DNA
 <213> *Bacillus subtilis*

<220>
 <221> misc_feature
 <222> (542)..(542)
 <223> n is a, c, g, or t

<400> 357
 ctcaaggggt tatgcttgat attgaccaag ggacataccc gtttgtcact tcatccaacc 60
 cggtcgccgg aggggtgacg atcggttcag gcgtaggccc gacaaaaatc cagcacgtcg 120
 tcggtgtatc taaagcgtac acaaccctg tcggtgacgg tcctttcccg actgagctga 180
 aagatgaaac cggggatcaa atccgtgaag tcggacgcga atacggcaca acgacaggcc 240
 gtccgcgccg tgtcggctgg tttgacagcg ttgttgtccg ccatgcccgc cgcgtcagcg 300
 gaatcacaga tctttctctg aactcaatcg atgtgctgac tggcattgaa acattgaaaa 360
 tctgtgtcgc ttaccgctac aaagggaag tgattgaaga attcccgga agtctgaaag 420
 ctctgcgaga gtgtgaaccg gtatatgaag aaatgcctgg ctggacggaa gatatacacag 480
 gcgcaaaaac attaagcgat cttcctgaaa atgcgcgcca ttatctggaa cgcgtgtctc 540
 anctgacagg tattccgctt totatcttct cagtaggtcc aga 583

<210> 358
 <211> 598
 <212> DNA
 <213> *Listeria monocytogenes*

<400> 358
 tttggaagg ggcgaagggt ttatgcttga tattgatcaa ggaacatata catttgtaac 60
 ttcaagtaac ccgattgctg gtggcgtaac tatcggtagt ggtgttggtc cttcaaaaat 120
 caatcatggt gttggtgtgg cgaaagctta tacaacacgt gttggtgatg gtcctttccc 180
 aacagaatta tttgattcta ttggtgacac tattcgtgaa gtcggtcatg aatatggtac 240
 aacgactggt cgtccgcgtc gtgtagggtt gtttgatagc gtagtggttc gtcatgcgcg 300
 tcgtgttagt ggattaacag atttatcgtt aacactactt gatgttttga caggaattga 360
 gacacttaaa atctgtgtag cttacaaatt agacggaaaa acaattacag agttcccagc 420
 aagtttgaaa gatttagctc gttgcgaacc tgtttatgaa gaacttcag gctggacgga 480

agatattact ggagttacat cactagatga tcttccagtg aactgccgcc attacatgga 540
gcgtatcgcc caacttacgg gaggcaagt ttctatgttc tcagtaggtc ccagacca 598

<210> 359
<211> 573
<212> DNA
<213> Lactococcus lactis

<220>
<221> misc_feature
<222> (2)..(2)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (18)..(18)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (567)..(567)
<223> n is a, c, g, or t

<400> 359
tnatgcttga tattgacnag gaacataccc atttgtaact tctcaaacc agtagctggt 60
ggggtaacga ttggctctgg tgtgggtcca tcaaaaattt caaaagttgt tgggtgttgt 120
aaagcctata cttcacgtgt gggatgatgt ccattcccaa cagaactttt tgatgaagtt 180
ggacatcaaa ttcgtgaagt aggacatgaa tatggaacaa caacaggacg tccacgtcgt 240
gttggttgggt ttgactcagt cgtaatgcgt catgcaaac gtgtttcttg cttgacaaat 300
cttagcttga attcaattga cgttctctca ggacttgaaa cagtaaaaat ttgtgttgct 360
tacgaacgta gtaatggtga acaaattact cattatccag catcacttaa ggaattagca 420
gattgcaaac caatctatga agaattgccg ggatgggtctg aagatattac ttcatgccga 480
actttagaag agttaccaga agctgctcgt aactatgttc gtcgggttg tgaactagtt 540
ggcgtacgta tctcgacttt ctgagtgctc ccc 573

<210> 360
<211> 419
<212> DNA
<213> Bacillus anthracis

<220>
<221> misc_feature
<222> (4)..(5)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (407)..(407)

<223> n is a, c, g, or t

<400> 360

accnntttta cagacgtaaa atagataggt tatatgggtg gtataagtaa gatacttggt 60

cgttcatacg gtctgcagcc attgtgtatt gaattaagtc atttgttccg atagagaaga 120

aatcaacttc ttttgcgaat tgatctgcta atactgctga agctgggatt tcaaccatca 180

taccaacttc aatagaatca gaaacagttg taccacttc tacaagtttc gctttttctt 240

ctaataagat cgcttttgct tgacggaact catcaagagt tgcaatcatt gggaacataa 300

tttttaagtt accgtatacg ctagcacgaa gtaatgcacg aagttgtgta cggaacacat 360

cttgctcatc aagacataag cgaattgcac ggtagcccaa gaacggnttc attctotta 419

<210> 361

<211> 445

<212> DNA

<213> Bacillus cereus

<400> 361

gccttcttta tgagcagcat cgataaccat ttttacaaga cgtaaaatag atgggttata 60

tggttggtat aagtatgata cttgttcggt catacgggtc gcagccattg tgtattggat 120

taaatcattt gttccgatag agaagaagtc aacttctttc gcgaattgat ctgctaatac 180

tgctgaagct gggatttcaa ccatcatacc aacttcaata gaatcagaaa cagttgtacc 240

cgcttctaca agtttcgctt tctcttctaa taaaatcgct ttcgcttgac ggaactcatc 300

aagagttgca atcattggga acataathtt taagttaccg tatacgctag cacgaagtaa 360

tgcacgaagt tgtgtacgga acacatcttg ctcatcaaga cataagcgaa ttgcacggta 420

tccaagaac ggatcattct cgtaa 445

<210> 362

<211> 445

<212> DNA

<213> Listeria monocytogenes

<220>

<221> misc_feature

<222> (436)..(436)

<223> n is a, c, g, or t

<400> 362
gccctcttta tgagaagcat caattacat ttttactaaa cgtaagatgg atggattgta 60
tggttggttaa aggtaagaaa cgcgttcggt catacgggtcc gcagccattg tatactgaat 120
taagtcattt gttccgatag agaagaaatc aacttctttt gcaaattgat cagcaagaac 180
tgcagcggca ggaatttcaa tcataattcc aagttcgatg gaatcagata cttctgttcc 240
agcagctttt agttttgctt tctcatctag taaaatatca cgtgcttgac ggaattcatt 300
tactgttgca atcatcgga acataatttt taagttacca tatacacttg cgcgaagtaa 360
ggcgcgaagt tgcgtacgga ataattcttc attcgcaaaa caaagacgaa ttgcgcggaa 420
tccaagaac ggatcnttct cctta 445

<210> 363
<211> 444
<212> DNA
<213> Streptococcus pneumoniae

<220>
<221> misc_feature
<222> (423)..(423)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (425)..(425)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (442)..(442)
<223> n is a, c, g, or t

<400> 363
cgcgtgagct gctttgatcc attgttaatc aagcgtagga ttgatgggtt gtatgggttg 60
taaaggatatg aaacttggtt gttcatacgg tctgctgcca ttgtatattg gatcaagtca 120
tttgtaccaa ttgagaagaa gtcaacttct ttagcaaatt ggtctgcaag catagccgct 180
gcaggaatct cgatcatgat accaacttga atgttatccg caactgcaac accttcagca 240
agaagggttg ctttttcttc atcaaagact gctttcgctg cacggaattc tttcaagagc 300
gcaaccattg ggaacatgat acgcaattga ccgtgaacag acgcacgaag aagagcacgg 360
atttgtgtgc ggaacatagc atctccagtc tcagagatag agatacgaag agcacggaat 420
ccnangaacg gatccttttt cnta 444

<210> 364
 <211> 441
 <212> DNA
 <213> Streptococcus pyogenes

<220>
 <221> misc_feature
 <222> (419)..(419)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (431)..(431)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (436)..(436)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (439)..(439)
 <223> n is a, c, g, or t

<400> 364
 tgcgctgctt tgatacattg ttgatcaaac gtaatattga tgggttgat ggttggtaaa 60
 ggtatgatac ttgttcgttc atacggctctg ctgccatagt gtattggata aggtcgtttg 120
 ttccaattga gaagaaatca acttccttag caaattggtc tgcaagcata gcagctgcag 180
 gaatctcaat catgatacca acttgatgt catcagcaac cgcaacgcct tctgcaagca 240
 agtttgcttt ttcttcgtca aagactgctt ttgcagcacg gaattcttta agaagcgcaa 300
 coattgggaa cataatacga agttgtccgt gaacagaggc acgaagaagc gcacgcattt 360
 gtgtgoggaa catggcatcc ccagtttcag agatggaaat acgaagagca cggaaaccna 420
 agaacggatc nttttncnt a 441

<210> 365
 <211> 440
 <212> DNA
 <213> Streptococcus agalactiae

<220>
 <221> misc_feature
 <222> (431)..(431)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature

<222> (438)..(438)
 <223> n is a, c, g, or t

<400> 365
 gagcagcttt gataacgttg ttaatcaaac gaaggattga tggattgtat ggttgataga 60
 ggtatgaaac ttgctcattc atacggtccg cagccattgt gtattggata agatcattag 120
 taccaattga gaagaaatca acttcttttg caaattggtc tgcaagcata gctgccgctg 180
 ggatttcaat cataatacca acttcaatgc cttcagctac tgctacaccg tcagctaaca 240
 agttcgcttt ctcttcttca aatatagctt tagcagcacg gaattcttta agcaaagcaa 300
 ccattgggaa catgatgcgt agctgtccat gaactgaagc acgaagaagt gctcggattt 360
 gtgtgcggaa cattgcatca ccagtttcag aaattgaaat acgcaatgca cggaatccca 420
 agaacggatc ntttttonta 440

<210> 366
 <211> 439
 <212> DNA
 <213> Streptococcus mutans

<400> 366
 tgagcagcct taacccatga tcaaccaagc gaagaatgga tggattataa ggttggtaga 60
 ggtatgatac ttgttcattc atacggtcag cagccatggt gtattgaata aggtcatttg 120
 taccgattga gaagaaatca acttccttag caaattggtc agccaacatt gcagctgcag 180
 gaatttcaat catgatacca acttgatat catctgaaac agcaacgcct tcagctttaa 240
 gattagcctt ttcttcttcc agaatacctt tagctttacg gaactcattg agcaaagcta 300
 ccattgggaa catgatacgc aactgaccat gaacagaagc acgcaaaagg gcacgcaact 360
 gtgtgcggaa catctgattg cctgtttctg agattgaaat acgaagtgca cgaaaaccaa 420
 agaacggatc attctctta 439

<210> 367
 <211> 445
 <212> DNA
 <213> Enterococcus flavescens

<220>
 <221> misc_feature
 <222> (436)..(436)
 <223> n is a, c, g, or t

<400> 367
 cgctcgtgtgc tgcatacaatt acatTTTTaa ttaaacgtaa gattgatggg ttgtatgggt 60

ggtataagta agaaacgcgt tcgttcatac ggtctgccgc cattgtgtat tggattaagt 120
 cggttggttcc aacactaaag aagtctactt ctttggcaaa tttatcagct aatacggcag 180
 ctgctggaat ttcaatcata atacctactt ggatatcggt tgaaacttca acaccttcgt 240
 tgactaattt ttgtttttcg tcttcaaaga ttgctttcgc tgctctaaat tctttcaaag 300
 tagcaaccat tgggaacatg atacgtaagt taccatgaac agacgcacgt aataatgcac 360
 gcatttgtgt acggaacatg ccgtcaccta gttctgataa gctaatacgt aatgcacggt 420
 aaccaagaa cggatnattc tcgta 445

<210> 368
 <211> 448
 <212> DNA
 <213> Staphylococcus aureus

<220>
 <221> misc_feature
 <222> (1)..(2)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (6)..(6)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (438)..(438)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (441)..(441)
 <223> n is a, c, g, or t

<400> 368
 nnccntctt atgtgacgct tcaataactt gtttaactaa acgtaagatt gaagggttat 60
 atggttggt tagatatgat acacgctctg acatacggtc agcagctaat gtgtattgaa 120
 ttaaatcatt tgtaccgata ctgaagaaat ctacttcttt agcaaagaca tcagctaatg 180
 ctgctgttgc aggtatctct accatgattc ctaattctat atcatccgaa atgtcatgac 240
 cttcattttt aagggtttct ttttcttcta ataatatagc ttttgcttct cttaaattcgt 300
 taattgttgc aaccattggg aacatgatat ttaacttacc ataaactgat gcacgtaata 360
 atgcacgtag ctgtggtctg aaaatatctt gttgcgcaag gcataaacga atcgcacggt 420

aacccaagaa cggatccntt ntccttaa

448

<210> 369

<211> 443

<212> DNA

<213> *Staphylococcus epidermidis*

<220>

<221> misc_feature

<222> (434)..(434)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (439)..(439)

<223> n is a, c, g, or t

<400> 369

cttctttatg agaagcttca ataacttggt taactaatcg taaaattgaa ggattatatg 60

gttgatataa gtatgaaact cgttcagaca tacggtcagc agctaattgtg tattgaatta 120

agtcattcgt tcctatacta aagaaatcta cttcttttagc aaatacatca gcaagtgccg 180

cggtagctgg aatttcaacc ataataccta attcaatatc atctgaaact tcgtaacctt 240

cgcgaagaag attttctttc tcttcaagaa gcattgattt agcgtcacgg aattctttaa 300

ttgttgctac cattgggaac ataattattca atttcccata gactgaagca cgtagtaatg 360

cacgtaattg tgggtctaaag atttcgggt gtgctaaaca taaacgtatc gcacgataac 420

ccaagaacgg atcnttctnc gta 443

<210> 370

<211> 440

<212> DNA

<213> *Bacillus thuringensis*

<220>

<221> misc_feature

<222> (437)..(437)

<223> n is a, c, g, or t

<400> 370

ctttatgagc agcatcgata accattttta caagacgtaa aatagatggg ttatatgggt 60

gggtataagta tgatacttgt tcgttcatac ggtctgcagc cattgtgtat tggattaaat 120

cattcgttcc gatagagaag aaatcaactt ctttcgcgaa ttgatctgct aatactgctg 180

aagctgggat ttcaaccatc ataccaactt caatagaatc agaaacagtt gtacccgctt 240

ctacaagttt cgctttctct tctaataaaa tcgctttcgc ttgacggaac tcatcaagag 300
 ttgcaatcat tgggaacata atttttaagt tgccgtatac gctagcacga agtaatgcac 360
 gaagttgtgt acggaacaca tcttgctcat caagacataa gcgaattgca cggtatccca 420
 agaacggatc atttctntta 440

<210> 371
 <211> 446
 <212> DNA
 <213> Staphylococcus hominis

<220>
 <221> misc_feature
 <222> (2)..(2)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (5)..(6)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (428)..(428)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (441)..(441)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (444)..(444)
 <223> n is a, c, g, or t

<400> 371
 cncncncctt atgaggaagc ttcaataacc tgtttaacta aacgtaaaat tgctggatta 60
 tatggttgat ataaatatga aacacgttca gacatacgat cagctgccat agtatattga 120
 attaagtcac tagttcctat actaaagaaa tctacttctt tagcaaagat atcagctaac 180
 gcagcagtag aaggaatctc taccatgata cctacttcga tatcatcagc aacttcttgt 240
 ccttcgctag ttaatttatc tttttcttct aaaagaatag ctttagcatc tctaaactct 300
 ttaatagtag ctaccattgg gaacataata ttttaatttac cataagcaga tgcgcgtaat 360
 aacgcacgta attgtgttct gaagatgtct tgttgatcta agcacaaacg aattgcacga 420
 taaccanga acggattcat ntenta 446

<210> 372
 <211> 445
 <212> DNA
 <213> *Enterococcus faecium*

<400> 372
 cgcggtgtgct gcatcaatta cttttttgat caaacgtaaa attgatgggt tatatgggtg 60
 gtacaagtaa gaaacgcgtt cgttcatacg gtctgctgcc attgtgtatt gaatcaaadc 120
 gttcgtacct acagagaaga aatctacttc ttttgcaaac ttgtctgcta agactgctgc 180
 tgctggaatc tcgatcatga tgccgacttg gatcgtatca gatacttcct tgccttcact 240
 gatcaatttt tgtttttctt cttcaaagat cgcttttgct gcgcggaatt ctttgagtgt 300
 agctaccata gggaacatga tacgtaagtt accatgaaca gatgcacgaa gcaatgcacg 360
 cttttgtgta cggaacattt cgtcgccttg ttcagataaa ctgatacgca atgcacgata 420
 tccaagaac ggatcattct cctta 445

<210> 373
 <211> 445
 <212> DNA
 <213> *Clostridium perfringens*

<220>
 <221> misc_feature
 <222> (2)..(2)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (434)..(435)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (437)..(438)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (441)..(441)
 <223> n is a, c, g, or t

<400> 373
 cntgtttgtg agctccatct attgtcattt tgattaatct taatacagct ggatgcattg 60
 gattgtaaag gtatgatacc ttttactca ttctgtcagc agctaagtga tattgtatta 120
 aatcgtagt tcctattgag aagaaatcaa catgcttagc taattcatca gcataaactg 180

ctgcagctgg gatttcaacc atgatacccc attgaattga atctgagtat gctatacctt 240
ctgcttttaa ctacgctttg cattcttcaa caaatgcttt agcttggttg aattcttcta 300
atcctgaaat cattgggaac attactgcaa gatttccata aacagaagct cttataaag 360
ctcttatttg aactctaaag atatcttttc tgtctaagca taatcttata gctctgtatc 420
ccaagaacgg atcnntnntc nttaa 445

<210> 374
<211> 440
<212> DNA
<213> *Bacillus mycoides*

<220>
<221> misc_feature
<222> (431)..(431)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (437)..(437)
<223> n is a, c, g, or t

<400> 374
ctttatgagc agcatcgatc accattttta caagacgtaa aattgatggg ttatatgggt 60
gggtataagta agatacacgt tcgttcatac ggtctgcagc cattgtgtat tggattaagt 120
catttggtcc gatagagaag aaatcgactt cttttgcgaa ttgatctgct aatactgctg 180
aagctggaat ttcaaccatc ataccaactt caatagaatc agaaacagtt gtaccgcgtt 240
ggacaagtct ttctttctct tctaataaaa tcgctttcgc ttgacggaat tcatcaagag 300
ttgcaatcat cggaacata atttttaagt taccgtatac gctagcacga agtaatgcac 360
gaagttgtgt acggaacaca tcttggttctt caaggcataa gcgaattgca cggtatccca 420
agaacggatc nttctcntta 440

<210> 375
<211> 455
<212> DNA
<213> *Streptococcus oralis*

<220>
<221> misc_feature
<222> (2)..(3)
<223> n is a, c, g, or t

<220>

<221> misc_feature
 <222> (434)..(434)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (446)..(446)
 <223> n is a, c, g, or t

<400> 375
 cnntttccct tcgcgtgagc tgctttgata acgttggtga tcagcgtagg attgatgggt 60
 tgtatgggtg gtaaagggtat gaaacttgct cgttcatacg gtctgctgcc atttgtgtatt 120
 ggatcaagtc gtttgtacca attgagaaga agtcaacttc tttagcaaat tgggtctgcaa 180
 gcattgctgc tgcaggaatt tcgatcatga taccaacttg gatattatcc gcaactgcaa 240
 caccttcagc aagaagggtt gctttttctt cgtcaaagac tgctttcgct gcacggaatt 300
 ctttcaagag cgcaaccatt gggaacatga tacgtaattg accgtgaaca gacgcacgaa 360
 gaagagcacg gatttgtgtg cggaacatag catctccagt ctcagagata gagatacgaa 420
 gagcacggaa tcnaagaac ggatcntttc tctta 455

<210> 376
 <211> 456
 <212> DNA
 <213> Enterococcus hirae

<220>
 <221> misc_feature
 <222> (2)..(2)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (447)..(447)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (450)..(450)
 <223> n is a, c, g, or t

<400> 376
 cnattttacct tcgcatgctc tgcatcgatc acgttttttaa tcaaacgtag gattgatggg 60
 ttgtaagggt gatacaagta tgaaacacgt tcgttcatac ggtcagctgc catagtgtat 120
 tggatcaagt cattcggttc tactgagaag aagtcaactt ccttagcaaa cttgtcagct 180
 aagacagctg ctgctggaat ttgatcatg atgccgactt ggatcgatc agatacttcc 240

acgccttcat tcaataatth ttgtttttcg tcttcaaaga ttgcttttgc agcacggaat 300
tctttaagag tcgctacat tggaacatg atacgtaagt ttccatgaac agatgcacgt 360
aataatgcgc gcatttgcgt acggaacatt tcgtcacctt gttctgacaa gctgattcgt 420
aatgcacgat agccaagaa cggatcnttn tctta 456

<210> 377
<211> 457
<212> DNA
<213> Enterococcus avium

<220>
<221> misc_feature
<222> (2)..(2)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (7)..(7)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (447)..(447)
<223> n is a, c, g, or t

<400> 377
cnatttncct tcgctgcgc tgcataatc acgtttttga ttaagcgtag aattgatggg 60
ttatatgggtt ggtaaaggta agaaacgcgt tcgttcatac ggtcagctgc catcgtgtat 120
tgaattaagt catttgttcc gatactgaag aatcaactt ctttggcaaa cttgtcagct 180
agtacagctg cagctggaat ttgatcatg attccgactt ggatcgtatc agaaacttcc 240
acgccttctt taaccaatth ttctttttct tcgttgaaca ttttcttcgc tgcacggaat 300
tcttttaatg tcgcaacat tggaacatg atgcgtaagt taccatgaac agaagcgcgc 360
aacaatgcac gtaattgtgt acggaacatg tcatgccta gttcggatag actaatcgc 420
aatgcacgat aaccaagaa cggatcnttt ttcttaa 457

<210> 378
<211> 437
<212> DNA
<213> Staphylococcus saprophyticus

<400> 378
tcgtaagaag cttctattac ttgttttact aaacgtaata ttgaaggatt atatggttga 60
tacaagtaag aaacacgttc tgacattcta tcagcagcca ttgtatattg aattaaatca 120

ttcggttccta tactgaagaa atcaacttct ttagcaaata catctgcaa cgcagcagta	180
gaaggaattt ctaccataat accaagttcg atatcatcag aaacttcaat gccttcattt	240
gttaagttat ctttttcttc aagtaacaat gcttttagcat cacggaactc ttggattgta	300
gctaccatag ggaacatgat attcaattta ccaaaagcag atgcacgtaa taatgcacgc	360
aactgtggtc tgaaaatatc aggttgatct aggcataaac ggatagcacg gtaaccaag	420
aacggatcat tctctta	437

<210> 379
 <211> 430
 <212> DNA
 <213> *Staphylococcus haemolyticus*

<220>
 <221> misc_feature
 <222> (419)..(419)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (422)..(422)
 <223> n is a, c, g, or t

<400> 379	
gaagcttcat gacttgttta accaagcgta aaatagctgg gttataaggt tggataaagt	60
atgaaacgcg ttctgacata cggtcagctg ccatagtata ttgaattaaa tcattagtag	120
caatactgaa gaaatccatt tcttttagcaa agatatcagc taaagcagct gtagatggaa	180
tctcaaccat gatacctaac tcaatttcat cagaaacgtc atgaccatca tttttaagat	240
tttctttttc ttctaacaga atggcttttag catcacggaa ttcatgatt gtagctacca	300
ttgggaacat aatgtttaat ttaccgtaag ctgacgcgcg taataatgca cgtaattgtg	360
ttctgaaaat atcttgttga tctaagcata gacgaattgc tctgtaacct aagaacggnt	420
cnttctctta	430

<210> 380
 <211> 444
 <212> DNA
 <213> *Enterococcus flavescens*

<220>
 <221> misc_feature
 <222> (1)..(1)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (438)..(439)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (442)..(442)

<223> n is a, c, g, or t

<400> 380

ngcatgcgct gagtcgatca cgtttttgat caaacgtaaa attgatgggt tgtatggttg 60

gtacaagtaa gacacgcgct cgttcatgcg gtctgcagcc attgtgtatt ggatcaagtc 120

attggtacca atactgaaga agtcaacttc cttcgcaaac ttgtctgcta agacagcagc 180

tgctggaatt tcgatcatga ttccgacttg gatctcgta gaaacctcaa cgccttcgctc 240

aatcaatttt tgacgctctt cttcatacat tttcttcgca gtacggaact ctttcaatgt 300

tgccaccatt gggaacatga tacgtaagtt gccgtgagca gaagcacgta acaacgcacg 360

aagttgggta cggaacatgt catccccaag ttcagataag ctgatacgca atgcacgata 420

gccaagaac ggatattnt chta 444

<210> 381

<211> 439

<212> DNA

<213> Enterococcus casseliflavus

<220>

<221> misc_feature

<222> (429)..(429)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (434)..(434)

<223> n is a, c, g, or t

<400> 381

gcgctgagtc gatacgtttt tgatcaaacg taaaattgat gggttgtatg gttggtacaa 60

gtaagacacg cgctcggttca tgcggtctgc agccatgggt tattggatca agtcattggt 120

accaatactg aagaagtcaa cttccttcgc aaacttgtct gctaagacag cagctgctgg 180

aatttcgatc atgattccga cttggatctc gttagaaacc tcaacgcctt cgtcaatcaa 240

tttttgacgc tcttcttcat acattttctt cgcagtagcg aactctttca atgttgccac 300

cattgggaac atgatacgta agttgccgtg agcagaagca cgtaacaacg cacgaagttg 360
 ggtacggaac atgtcatccc caagttcaga taagctgata cgcaatgcac gatagcccaa 420
 gaacggatna tttntctta 439

<210> 382
 <211> 450
 <212> DNA
 <213> Enterococcus gallinarum

<220>
 <221> misc_feature
 <222> (6)..(6)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (443)..(443)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (447)..(447)
 <223> n is a, c, g, or t

<400> 382
 accttngcat gtgctgaatc gattacgttt ttgatcaacg tagaatagat gggttatatg 60
 gttggtaaag atatgaaact tgttcattca tacggctctgc agccattgtg tattggatca 120
 agtcattggt accaatactg aagaagtcta cttccttggc aaatttgtca gctaagacag 180
 ctgctgcagg aatttcgatc atgataccta cttgaatatc ttcagagacg gttacgcott 240
 catcgatcaa tttttgacgt tcttcttcgt acattttttt cgcagcacgg aactctttca 300
 atgttgccac cattgggaac ataatccgca agtttccgtg agcagaagca cgtaacagcg 360
 cacgaagttg tgtacggaac atgccgtcac ccaactcaga caaactgata cgcaatgcac 420
 gatagcccaa gaacggatct ttntccntta 450

<210> 383
 <211> 443
 <212> DNA
 <213> Enterococcus raffinosus

<220>
 <221> misc_feature
 <222> (1)..(1)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (432)..(433)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (438)..(438)
 <223> n is a, c, g, or t

<400> 383
 ntgtgctgca tcaatgacgt ttttaatcaa acgtaagatt gatggggttat atgggttgata 60
 cagggtatgaa acgcgttctgt tcatacgggtc agcagccatt gtgtattgaa tcaagtcggt 120
 tgttccgata cttaaagaagt caacttcttt tgcaaacttg tcagctagaa cagctgcggc 180
 agggatctcg atcatgattc cgacttgaat cgtatcagaa accttcacgc ctctgttaac 240
 aagcttttct ttttcttctgt tgaacatttt ctctgctgca cggaactctt ttaatgttgc 300
 aaccattggg aacatgatgc gtaaattgcc atgaactgaa gcgcgtaaca atgcacgtaa 360
 ctgtgtacgg aacatatcgt cgcctaattc agataaactg atacgcaatg cagcataacc 420
 caagaacgga tnnttctnctg taa 443

<210> 384
 <211> 453
 <212> DNA
 <213> Enterococcus villorum

<220>
 <221> misc_feature
 <222> (3)..(3)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (14)..(14)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (432)..(432)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (434)..(434)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (441)..(441)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (451)..(451)

<223> n is a, c, g, or t

<400> 384

ggnctctcgt cgtnagctgc atcaatcacg tttttgatta aacgtaaaat tgatgggtta 60

taaggttggt ataagtatga aacgcgttcg ttcatacggg cagctgccat agtgtattga 120

atcaaatacat ttgttcctac tgagaagaag tcaacttcct tcgcaaactt gtcagctaaa 180

acagcagctg caggaatttc aatcataatg ccgacttgga tcgtatcaga tacttccacg 240

ccttcattca ataacttttg tttttcatct tcaaagattg cttttgcccc acggaattct 300

ttaagtgtcg ccaccattgg gaacatgata cgtaagttac cgtgaacgga tgcacgcaat 360

aacgcacgca tttgtgtacg gaacatttcg tctccttggt cagaaagact gatacgtaat 420

gcacgatatc cnangaacgg nttatttttc nta 453

<210> 385

<211> 442

<212> DNA

<213> Clostridium difficile

<220>

<221> misc_feature

<222> (4)..(5)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (9)..(9)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (13)..(13)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (17)..(17)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (23)..(23)

<223> n is a, c, g, or t

<220>

<221> misc_feature
 <222> (36)..(36)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (67)..(67)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (83)..(83)
 <223> n is a, c, g, or t

<400> 385
 tttninggang gcntctntcg tangcattgt ctatancagt ctttataagt cttaaaacag 60
 ctggatnaaa ttgattgtaa agntaactta tcttttgatt cattctatca actgcacaag 120
 tgtattgaat taaatcatta gttcctatag agaagaaatc tacgtgttta gccaatacat 180
 cagatatcac agcagcagat ggaacttcta tcatcatacc aatttctaca tcttttagcat 240
 aagccacacc ttcagaatca agttotgcta aaacttcttt tacaacttct ttagcttgta 300
 acaactcttc taaagatgaa atcattggga acatgattct taatcttcca tgaacactag 360
 ctctatataa agctctcaat tgagtcctaa atatatcttt tctatctagg caaagtcctta 420
 ttgctctgta acccaagaac gg 442

<210> 386
 <211> 444
 <212> DNA
 <213> Streptococcus mitis

<220>
 <221> misc_feature
 <222> (1)..(1)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (424)..(424)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (442)..(442)
 <223> n is a, c, g, or t

<400> 386
 ngcgtgagct gccttgataa cgttgttgat caagcgaagg attgatgggt tatatgggtg 60
 gtaaaggat gaaacttgct cgttcatacg gtctgctgcc attgagtatt ggatcaagtc 120

gtttgttcca attgacatga agtctacttc ttttgcaaat tggctctgcaa gcacgctgc 180
 tgcagggatt tcaatcatga taccaacttg gatatcatcc gcaactgcaa caccttcagc 240
 aagaaggttt gccttttctt cttcataaac tgctttggct gcacggaatt ctttcaaaag 300
 agcaaccatt gggaacatga tacgcaattg accatgaaca gaagcacgaa gaagagcacg 360
 gatttgtgta cggaacattg catctccagt ttcagaaata gagatacgaa gggcacggaa 420
 tccnaagaac ggatattttt cnta 444

<210> 387
 <211> 446
 <212> DNA
 <213> Bacillus halodurans

<220>
 <221> misc_feature
 <222> (1)..(1)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (424)..(424)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (435)..(436)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (439)..(439)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (443)..(443)
 <223> n is a, c, g, or t

<400> 387
 nccttcgcta tgagctgctt taataaccat atcgacgagg cgtaaaatcg cagggtggta 60
 tggctgatac aggtaggaga ctgctcatt catgcggtca gcagccatcg tatattgaat 120
 taagtcgttc gttccgatac tgaaaaagtc tacttctttt gcaaaaagat tagccgctac 180
 cgccgtcgat gggatttcta ccatgattcc cacttcaatt gaatcggata cgtccactcc 240
 ttcactaaga agcttgtctt tttcctcttg catgatcgct tttgcttggc gaagctcttc 300
 aagggtggcg atcattggaa acatcacctt taagttaccg tatgtgcttg cgccaagcaa 360

ggcacggagt tgggtccgga aaatatcttg tttttcaagg cacagacgaa tcgcccggaa 420
aocnaagaac ggatnnttnt tcntaa 446

<210> 388
<211> 436
<212> DNA
<213> Bacillus weihenstephanensis

<220>
<221> misc_feature
<222> (1)..(1)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (427)..(427)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (433)..(433)
<223> n is a, c, g, or t

<400> 388
ntgagcagca tcgataacca tttttacaag acgtaaaata gatgggttat atggttggta 60
taagtaagct acttgttcgt tcatacgggc tgcagccatt gtgtattgga ttaagtcatt 120
tgttccaata gagaagaaat caacttcttt tgcgaactga tcagctaata ctgctgaagc 180
tggaatttca accatcatat caacttcaat agaatcagaa acagttgtac ccgctttaac 240
aagtctttct ttctcttcta ataagattgc tttcgcttga cggaactcat caagagttgc 300
aatcattggg aacataatth ttaagttacc gtatacgcta gcacgaagta atgcacgaag 360
ttgtgtacgg aacacatctt gctcatcaag acataagcga attgcacggc atcccaagaa 420
cggatcnttc tcntta 436

<210> 389
<211> 458
<212> DNA
<213> Streptococcus species

<220>
<221> misc_feature
<222> (2)..(3)
<223> n is a, c, g, or t

<220>

<221> misc_feature
 <222> (5)..(5)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (8)..(8)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (435)..(435)
 <223> n is a, c, g, or t

<400> 389
 cnnanttnc ttcgcgtgag ctgctttgat aacgttggtta atcaacgaag gattgatggg 60
 ttgtatgggtt ggtaaaggta tgaaacttgt tcgttcatac ggtcagcagc catttgttat 120
 tggataagggt cgtttgttcc gattgagaag aagtcaactt ctttcgcaaa ttgggtcagca 180
 agcatagctg cagctgggat ttcaatcatg ataccaactt ggatatcatc tgaaacggca 240
 acaccttcag ctttaagggtt tgctttttct tcatcaaaga ttgcttttagc agcacggaat 300
 tctttaagaa gagcaaccat tgggaacatg atacgaagtt gtccgtgtac agatgcacga 360
 agaagtgcac ggatttgtgt acggaacatt gcatttcctg tttctgagat agaaatacga 420
 agtgcacgga atccnaagaa cggatccttt ttccttaa 458

<210> 390
 <211> 446
 <212> DNA
 <213> Streptococcus gordonii

<220>
 <221> misc_feature
 <222> (1)..(1)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (431)..(431)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (442)..(442)
 <223> n is a, c, g, or t

<400> 390
 ntgccttcgc atgagccgcc ttgataacat tgttgatcaa gcgaaggata gatggggttat 60
 aagggtgata gaggtaagag acttgttcat tcatccggtc agctgccata gtgtactgga 120

tcaagtcgtt ggtaccaatt gagaagaagt caacttcctt ggcaaattga tccgccaaca	180
tagctgctgc tggaatttca atcatgatac ccacttgaat gttatccgct acagcaacac	240
cttcagcttg caatttcgct ttttcttctt cgtaaactgc tttagcctta cgggaattctg	300
ttagaagggc taccattggg aacatgatac gtaattgtcc atgtacagac gcacgtaaga	360
gagcgcggat ttgtgtacgg aacatagcat taccagtttc agagatagag atacgcaaag	420
cacggaagcc naagaacggt cntttt	446

<210> 391
 <211> 446
 <212> DNA
 <213> Streptococcus canis

<220>
 <221> misc_feature
 <222> (2)..(2)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (424)..(424)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (435)..(435)
 <223> n is a, c, g, or t

<400> 391	
cncgtgagct gctttgataa cgttgttaat caaacgaagg attgatgggt tgtatggttg	60
gtaaagggtat gaaacttggt cgttcatacg gtcagcagcc attgtgtatt ggataaggtc	120
gtttgttccg attgagaaga agtcaacttc tttcgcaaat tggtcagcaa gcatagctgc	180
agctgggatt tcaatcatga taccaacttc gatatcatct gaaacggcaa caccttcagc	240
tttaaggttt gctttttctt catcaaagat tgcttttagca gcacggaatt ctttaagaag	300
agcaaccatt gggaacatga tacgaagttg tccgtgtaca gatgcacgaa gaagtgcacg	360
gatttgtgta cggaacattg catttcctgt ttctgagata gaaatacgaa gtgcacggaa	420
tccnaagaac ggtcnttttt ctctaa	446

<210> 392
 <211> 437
 <212> DNA
 <213> Bacillus pumilus

<220>
 <221> misc_feature
 <222> (2)..(2)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (415)..(415)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (426)..(426)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (433)..(433)
 <223> n is a, c, g, or t

<400> 392
 cntacgctgc ttcataacaa gcgtaatcaa acgtaaaatc gctggattgt aaggctggta 60
 aagataagac actcgttcgt tcattcgatc agcagccatt gtgtattgaa tcaaatcatt 120
 tgttccaata ctgaagaaat caacttcttt tgogaattgg tctgcgatga cagcggttga 180
 tggaatttct accattatac cgatttcaat ggaatcggat acgtctgtac cagcggcaac 240
 caatgcttct ttttcttcaa gtaaaatggc ttttgcttct ctaaattctg ataatgtcgc 300
 gatcataggg aacatgattt tcaagtttcc atatgtactt gcacgaagta aggcgcgtag 360
 ttgtgttctg aaaatctcct gttcttcgag gcaaaggcgg atcgctctaa agccnaagaa 420
 cggatntttt tcnttaa 437

<210> 393
 <211> 437
 <212> DNA
 <213> Bacillus species

<220>
 <221> misc_feature
 <222> (426)..(426)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (429)..(429)
 <223> n is a, c, g, or t

<220>

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<221> misc_feature
<222> (431)..(431)
<223> n is a, c, g, or t

<400> 393
tgagcgcacg gataaccatt tttacaagac gtaaaataga tgggttatat ggttggtata      60
agtatgatac ttgttcgttc atacgggtctg cagccattgt gtattggatt aaatcatttg      120
ttccgataga gaagaagtca acttctttcg cgaattgatc tgctaatact gctgaagctg      180
ggatttcaac catcatacca acttcaatag aatcagaaac agttgtaccc gcttctacaa      240
gtttcgcttt ctcttctaataaaaattgctt ttgcttgacg gaactcatca agagttgcaa      300
tcattgggaa cataattttt aagttaccgt atacgctagc acgaagtaat gcacgaagtt      360
gtgtacggaa cacatcttgc tcatcaagac ataagcgaat tgcacggtat cccaagaacg      420
gatccnttnt nctttaa                                                    437

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<210> 394
<211> 443
<212> DNA
<213> Lactococcus lactis

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<220>
<221> misc_feature
<222> (16)..(16)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (422)..(422)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (430)..(431)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (437)..(437)
<223> n is a, c, g, or t

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<400> 394
gtgagctgct ttgatncatt gttaatcaaa cgaaggattg atggattgta aggttggttaa      60
aggtaagaaa cttgttcatt catacggtct gcagccattg tatattggat gaggtcgttt      120
gtaccaattg agaagaaatc aacttcctta gcaaattggt ctgcaagcat tgctgctgct      180
ggaatttcaa tcatgatacc tacttcgata ccatctgcaa ctggaacacc ttcagcaatc      240

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aattttgctt tttcttcgtc ataaatcttc ttagctgcac ggaactcagt tacgagagca 300
accattggga acatgatacg aagttgtccg tgtacagaag cacgcaagag tgcacgcaat 360
tgtgtacgga acattccgtc accagctggt gaaaggctga tacgaagtgc acgccatccc 420
angaacggtt nttttnttt taa 443

<210> 395
<211> 454
<212> DNA
<213> Bacillus firmus

<220>
<221> misc_feature
<222> (8)..(8)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (16)..(16)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (19)..(19)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (22)..(22)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (449)..(449)
<223> n is a, c, g, or t

<400> 395
tccaggangg gttctntcnt angtgcgtc aattaccatt ttaactaaac gcaggattgc 60
aggattatac ggctggtaaa ggtaagaaac acgctcattc atgcggtctg cagccattgt 120
gtactgaatt agatcattag tgccaacact gaagaaatcg acttcttttag caaactgac 180
agccataaca gcagttgaag gaatttcaac cataattcca atttcaatgt tgtcggcaac 240
ctctgtcctc tcgctcacia gcttttgttt ttcttcttca aggattgctt tgccctgacg 300
gaattcttca agagtggcaa tcatagggaa catgatttta aggtttccat aggtgcttgc 360
tcttaataaa gcccttaatt gcgtcctgaa catatcctgt tcttccagac acagacgaat 420
cgcccgggaag cccaagaacg gattcattnt ctta 454

<210> 396
 <211> 434
 <212> DNA
 <213> Haemophilus influenzae

<220>
 <221> misc_feature
 <222> (425)..(426)
 <223> n is a, c, g, or t

<400> 396
 tgagaggcat caatcacttg tttaattaaa ccaagcacag aggggtgcat cggattataa 60
 agatgggaaa taaactcatt accgcgatct acagccaaag tatattgagt taaatcggtta 120
 gtaccgatac taaagaaatc cacttccttt gctaaaaatt ttgcatttac tgcggcagag 180
 ggggtttcga ccattacacc aacttgata ttattatcaa acagtctccc ctcttcacgt 240
 aattccgctt ttaatgtttc aataaccgct tttaattccc gaatttcttc tacagaaata 300
 atcatcggga acattaccgc caatttacca aaagctgaag cacgtaacac cgcgcgtaat 360
 tgtgcattta aaatttcacg acgatctaata gcaatgcgaa tcgcacgcca tcccaagaac 420
 ggatnntttt tctt 434

<210> 397
 <211> 442
 <212> DNA
 <213> Streptococcus bovis

<220>
 <221> misc_feature
 <222> (420)..(420)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (432)..(432)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (438)..(438)
 <223> n is a, c, g, or t

<400> 397
 tgagctgctt tgataacggt gttaatcaaa cgaaggattg atgggttata tgggttggtta 60
 aggtatgaaa cttgttcatt catacgggtca gcagccattg tgtattggat aaggctcggtt 120
 gtcccgattg agaagaagtc aacttccttt gcaaattggt cagcaagcat agctgcagct 180

gggatttcaa tcatgatacc aacttggata tcatctgaaa cggcaacacc ttcagcttta 240
 aggttagctt tttcttcata aaagattgct ttagcagcac ggaattcttt aagaagtgca 300
 accattggga acatgatacg aagttgtccg tgtacagatg cacgaagaag tgcacggatt 360
 tgtgtacgga acattgcatt tctgtttct gagatagaaa tacgaagtgc acggaatccn 420
 aagaacggtc cntttttnct ta 442

<210> 398
 <211> 443
 <212> DNA
 <213> Enterococcus durans

<220>
 <221> misc_feature
 <222> (431)..(432)
 <223> n is a, c, g, or t

<400> 398
 tgtgtgcat caatcacgtt tttgatcaaa cgtaaaattg aagggttata aggttgatac 60
 aagtaagata cacgttcgtt catgcggtca gctgccattg tgtattgaat caagtcattc 120
 gtacctactg agaagaagtc aacttccttc gcaaacttat ctgctaagac agctgctgca 180
 gggatttcaa tcatgatgcc gacttggatc gtatcagata cttccacgcc ttcgctcact 240
 aatttttgtt tttcttcttc aaagattgct ttcgctgcac ggaattcttt aagagtgct 300
 accattggga acatgatgcg taagtttcca tgaacagatg cacgtaacaa tgcgcgcatt 360
 tgtgtacgga acatttcgtc acctaatcca gacaagctga tacgtagcgc acgatagccc 420
 aagaacggat nnttttcct taa 443

<210> 399
 <211> 450
 <212> DNA
 <213> Streptococcus sanguis

<220>
 <221> misc_feature
 <222> (434)..(435)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (441)..(441)
 <223> n is a, c, g, or t

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<400> 399
cgcatgagct gccttgataa cattgttaat caagcgaagg atagatggat tgtaagggtg      60
atagaggtaa gagacttgct cattcatccg gtcagccgcc atagtgtact gaatcaagtc      120
gttagtacca attgagaaga agtctacttc cttggcaa attgatccgcca acatagctgc      180
tgctgggatt tcaatcatga taccacttg gatattatct gctactgcaa cgccttcagc      240
ttgcagctta gctttttctt cgtcataaac cgcttttagct ttgcggaatt ctgtcagaag      300
ggccaccatt ggaacatga tacgcaattg tccatgtaca gaagcacgca agagagcgcg      360
gatttgtgta cggaacatag catcgccagt ttcagagata gagatacgca aagcacggaa      420
accaaagaac ggtntttttt ntctttaaaa      450

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<210> 400
<211> 453
<212> DNA
<213> Escherichia coli

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<220>
<221> misc_feature
<222> (440)..(441)
<223> n is a, c, g, or t

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<400> 400
tcctttacct tctgcatgag agcatcaata acttgcttga tcaagttcag tacggacggg      60
gacattggct ggtagagatg tgaaatcata tcattaccac ggtcaactgc cagggtgtac      120
tgcggttaaat cattggtgcc gatactaaag aaatcaactt ctttggctaa atgacgcgca      180
atggtcgcgg ctgctgggtg ttccaccatt acgccgatct caattgactc gtcaa atgct      240
ttaccttcgt cacgcaattc ctgtttgtag atctcgatct ctttcttcag tgcacgcact      300
tcttcaacag agatgatcat cggaacata atgcgcagct taccgaaagc agaggcacgc      360
agaatcgcac gcacctggtc acgcaggatt tctttacgat ccatggcgat acgcactgca      420
cgccagccca agaacggatn nttttttctt taa      453

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<210> 401
<211> 449
<212> DNA
<213> Serratia liquefaciens

```

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<220>
<221> misc_feature
<222> (1)..(1)
<223> n is a, c, g, or t

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<220>
 <221> misc_feature
 <222> (4)..(4)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (17)..(17)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (427)..(427)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (435)..(435)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (438)..(438)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (445)..(445)
 <223> n is a, c, g, or t

<400> 401
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 catcggttta tagagatgag aaatcagctc attgccgcga tctaccgcca gagtatactg 120
 ggtagatcg tttgtcccaa tactaaagaa gtcgacttct ttcgccaggt gatgagcaat 180
 cactgccgcg gccggtgttt ccaccattac gccacttca atgggtctcgt caaaggcctt 240
 ggattcttca cgcagctgcg ccttcagcgt ctcgatttca cctttcagat cgcggacttc 300
 ttccacggaa atgatcatcg ggaacatgat gcgcagtttg ccgaacgcgg aagcgcgcag 360
 gatggcgcgc agttgcgcgt gcaggatttc tctgcggtcc atggcgatac gaatcgcgcg 420
 ccagccnaag aacgnttntt tttanttta 449

<210> 402
 <211> 425
 <212> DNA
 <213> Proteus mirabilis

<400> 402
 gtgtgatgca tcaatcacct gtttaatcag attaagtaca gcaggtgaca ttggattata 60

tagatgagat atcagctcat ttccacgggc tacagccaga gtatattgtg ttagatcggt	120
agtcccaata ctgaaaaagt caacttcttt tgccatatgg cgagccataa cagccgctgc	180
tggcgtttca accataacac cgacttcgat agattcatca aaaggcttat tttcttcacg	240
aagctggctt ttcagtatct caagttccgc tttcaatgct cggatctctt caacagagat	300
aatcattgga aacataatac gtagtttacc aaaagcagac gctcttaaga tagcacgtaa	360
ttgtggatga aggatctctt tgcggtaag acaaatacga attgcacgcc aaccaagaa	420
cggt	425

<210> 403
 <211> 433
 <212> DNA
 <213> *Proteus vulgaris*

<400> 403	
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ggattataca gatgagatat cagctcattt ccacgggtcta cagccagagt atattgtgtt	120
agatcggttag tcccaatact gaaaaagtca acttcttttg ccatgagacg tgccattacg	180
gccgcgcgag gggtttcaac catgacaccg acttcgatag actcatcgaa agttttgttt	240
tctgcacgaa gctggctttt cagtatttca agttctgctt tcaatgcgcg aatctcttca	300
atagagataa tcattggaaa cataatgcgt agtttacc aaagcagatgc tcttaagata	360
gcacgtaatt gcgaatgaag gatctcttta cggtaagac aaatacgaat tgctctccaa	420
cccaagaacg gtc	433

<210> 404
 <211> 503
 <212> DNA
 <213> *Streptococcus pyogenes*

<400> 404	
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taaaatacaa acaccattaa gaacagtctt agtctttttt gtgtttgctg ttttatcatt	120
gcttcagaag ttgtctcaaa gaaagagata gcttttttct tttggcgtct tcgatgactt	180
ttaggagaga aagatgatag cactcggttaa attaattgat aaccttgttt ggggaccgcc	240
cctcttaatt ttattgggtg ggacggggat ttaccttacc agtcatttag gattaattca	300
aatcttaaaa ctaccaagag cctttaaaact ctttttttca gatgacgaag gacatggaga	360
tatttcatcc ttgtctgctc ttgcaactgc ccttgccgct actgtcggaa ctggtaacat	420

tggttgggggt gccactgcta tcaagtctgg tggctcctgga gcgctctttt ggatgtgggt 480
 tgccgctttt tttggaatgg ccc 503

<210> 405
 <211> 469
 <212> DNA
 <213> Streptococcus oralis

<400> 405
 ccgtaaaggc accgaagggg caaggcaggt aactgctcaa actctcaggt aaaaggacag 60
 agctaggata gaccgctttt tggcatttat ctaagcattc cagagtacat gtatcttgca 120
 tgtactcttt cttttgggggt tgaaagatag gagaaggaca tgtagaatt gcttaaagcg 180
 cttgatgctt ttgcttgggg gcctcccctc ttgatcttat tggtcggaac gggatatctat 240
 ttgaccatcc gactgggcct tttgcaggtt actcgtctcc ctaaggcctt tcagttgatc 300
 tttaccaagg acaaggggca cggcgatgtg tcgagctttg ctgctctctg tacggctcta 360
 gcagccacag ttggtacggg aaatatcatc ggggtagcga cagccattaa ggttgaggga 420
 ccaggggccc tcttttgat gtggatggcg gccttctttg gaatggccc 469

<210> 406
 <211> 467
 <212> DNA
 <213> Streptococcus faecalis

<400> 406
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 ctaggataga ccgctttttg gcatttatct aagcattcca gagtacatgt atcttgcatg 120
 tactctttct tttgggggtt aaagatagga gaaggacatg ttagaattgc ttaaagcgct 180
 tgatgctttt gcttgggggc ctcccctctt gatcttattg gtcggaacgg gtatctatct 240
 gaccatccga ctgggccttt tgcaggttac tcgtctccct aaggcctttc agttgatctt 300
 taccaaggac aaggggcacg gcgatytgtc gagctttgct gctctctgta cggctctagc 360
 agccacagtt ggtacgggaa atatcatcgg ggtagcgaca gccattaagg ttggaggacc 420
 aggggccctc ttttgatgt ggatggcggc cttctttgga atggccc 467

<210> 407
 <211> 578
 <212> DNA
 <213> Streptococcus agalactiae

<400> 407
 tataagtagc aacatctttg tattgacacc aagatgtgct ctaggcgccg aaggggcaag 60
 aagagtaaaa caactcctcc aatctctcag gcaaaaggac agaagctaaa agccaatatt 120
 aataatgagt agtaagctta ttaagtttac tactaccttt atttgtgcgc tttttagcta 180
 gcatctttca gaagttatct cttttagaga taactttttt cgtttcatta cagaatccat 240
 aggtatgtca tgtatcaaag gagaacatat gctaacactt tttactcata tcaatagctt 300
 cgtttggggg ccacctttac ttgctttatt agtcggaaca ggtatttacc tatcatttcg 360
 cttagggtttt gttcaattga gacaactttc tagagctttc aaattgattt tccgagaaga 420
 taacggacaa ggggatattt caagttatgc tgctcttgca actgctcttg ctgcaacggg 480
 agggacaggt aatatcgttg gtgtggctac ggctattaaa tctggaggac caggagcttt 540
 gttttggatg tgggtagccg ctttttttgg aatggccc 578

<210> 408
 <211> 468
 <212> DNA
 <213> *Streptococcus pneumoniae*

<400> 408
 gtaaaggcac cgaaggggca aggcaggcaa ctgctcaaac tctcaggtaa aaggacagag 60
 ctaggataga ccgcttttta gcatttatct aagcattcca gagtacatgt atcttgcatg 120
 tgctctttct tttgggggtt aaacgatagg agaaggaaat gttagaattg cttaaataca 180
 tcgatgcttt tgcttgggga ccgcccctct tgattttatt ggtcggaaca gggatttacc 240
 taaccatgcg gctaggactc ttgcaggttt tgcgctctgcc caaggccttt cagcttattt 300
 ttatccagga taagggacat ggtgatgtat ccagttttac agctctgtgt acagccttgg 360
 catcaactgt tggaacagga aatatcatag gagttgcgac ggctatcaag gttggtggac 420
 caggagctct attttggatg tggatggcgg ttttctttgg aatggccc 468

<210> 409
 <211> 463
 <212> DNA
 <213> *Enterococcus durans*

<220>
 <221> misc_feature
 <222> (1)..(1)
 <223> n is a, c, g, or t
 <220>

<221> misc_feature
 <222> (3)..(3)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (21)..(21)
 <223> n is a, c, g, or t

<400> 409
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 tttcttttgg gggtgaaacg ataggagaag gaaatgtag aattgcttaa atcaatcgat 180
 gcttttgctt ggggaccgcc cctcttgatt ttattggtcg gaacagggat ttacctaacc 240
 atgcggctag gactcttgca ggttttgcgt ctgccaagg cctttcagct tatttttatc 300
 caggataagg gacatggtga tgtatccagt ttacagctc tgtgtacagc cttggcatca 360
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 gctctatttt ggatgtggat ggcggttttc tttggaatgg ccc 463

<210> 410
 <211> 536
 <212> DNA
 <213> Streptococcus anthracis

<400> 410
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 tcggtttatt tttctatccc ttgtttctcc agagaccatt tcatttactt gaagtggttt 180
 ttattttttc taaaaaagga gaataaagat ggagacagta agtaaagtat tagaacaat 240
 caatcactat gtgtggggat taccaacgtt attgttactc gttggtactg gtattattct 300
 cacagtgcgt ttaaaagggt tacagtttag taaactatta tacgctcaca aactagcttt 360
 taaaaaatca gaagatacat cttcctctgg agatattagc cacttccaag cgcttatgac 420
 agctatggcg gcaacgattg gtatgggaaa tatagctggg gttgcaactg ctgtgacgat 480
 cggtggacct ggtgcaatct tttggatgtg gattactgct ttgtttggaa tggccc 536

<210> 411
 <211> 537
 <212> DNA
 <213> Bacillus cereus

<400> 411
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 tattagcgga taatctctca ggtaaaagga cagagacaag cgaaagaaaa cgccgatttg 120
 tatcggttta tttttctatt ccttgtttct ccagagacca tttcatttat gtgaagtgg 180
 tttttatatt ttctaaaagg agaataaaga tggagacagt aagtaaagta ttagaacaaa 240
 tcaatcacta cgtatgggga ttaccaacct tattcctttt agtcgggact ggaatcattc 300
 tcacagtgcg tctaaaaggt ttgcagttta gtaaactggt atacgctcac aaactagcat 360
 ttgaaaaatc agaagataca tcttcttttg gagatattag tcatttccaa gcactcatga 420
 cagcaatggc cgccaccatc gggatgggaa atatagctgg tgcgcaaca gctgttacia 480
 tcggtggacc gggggcaata ttttgatgt ggatcactgc cttgtttgga atggccc 537

<210> 412
 <211> 561
 <212> DNA
 <213> Streptococcus mutans

<400> 412
 actgataatt gacggacttc tggagagacc tactaggcgc cgaaggggca aggctgtttg 60
 ctcaaactct caggcaaaag gacagaaaag aaaaaagaa tttttaatgt tgaaacaatt 120
 cttatcttct aactctagag gtatcgtcaa gtattgacaa cctctttttt gatttccatt 180
 tcggtttatg aggagaaaag tttatatgtt aacatttttt aaagctctag acagccttgt 240
 ctggggtgct cccctattag ttcttttagt cgggtactgga atttatttga gtactcgctt 300
 aagattattg caggtgttga aactcccttt agcctttaaa ctcatctttg ccgaggacaa 360
 aggggaaggt gatatttcga gttttgcggc tttagctacc gctcttgctg ccactgttgg 420
 aactggaaat atcgttggtg ttgccactgc aatcaaagct ggcggtccgg gagcactctt 480
 ttggatgtgg atagcagctt tttttggtat ggcaactaaa tatgccgaag gtcttctggc 540
 tataaaatac cgtactaagg a 561

<210> 413
 <211> 1680
 <212> DNA
 <213> Listeria monocytogenes

<400> 413
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 ctacctgcct taaagaaagc gctcaacata aaaaaacttg ttttcagaaa ataaaaatcg 120

tgccaaatcg gctcagctat gctataatag gtaagttgat ttaaaccgaga cgatagcgac	180
ggaggaaaat aaatctatct tctctcttct tttggctaata cttcacgata aatgtttgga	240
tttttaattt aggaggaaac aagattgaat ttaagaaatg atattcgtaa tgtagcaatt	300
attgcccacg ttgaccatgg taaaacaact ctagtagacc aattattacg ccagtcaggc	360
acattccgcg acaatgaaac agttgcagaa cgcgcaatgg acaacaatga tttagaaaga	420
gaacgcggta ttacaatctt agcgaaaaat acagcgatta agtatgaaga tacacgtgta	480
aacatcatgg atacacctgg acacgccgat ttcgggtggag aagtagaacg tatcatgaaa	540
atgggtgatg gtgttctttt agtagtggac gcgtatgaag gtacgatgcc tcaaaccagt	600
tttgtactaa aaaaagcact agaacaaaac ctaactccaa tcgtagtagt aaacaaaatt	660
gaccgtgact ttgctcgccc agaagaagtt gttgatgaag tattagaatt attcatcgaa	720
ctaggcgcaa acgacgatca attagaattc ccagttgttt atgcttctgc aatcaacgga	780
acttcaagct atgattccga tccagcagaa caaaaagaaa caatgaaacc acttttagac	840
acaattatcg aacatatccc ggctccagtt gataatagcg acgaaccatt acaattccaa	900
gtatcattac ttgattataa tgactatggt ggctgatatc gtattggccg cgtattccgt	960
ggaacaatgc acgtgggaca aacagttgct ttaattaaac ttgatggcac agtaaaacaa	1020
ttccgtgtaa cgaaaatggt cggtttcttc ggactaaaac gtgacgaaat taaagaagca	1080
aaagctgggtg atttagtagc attagcaggt atggaagaca tcttcgttgg tgaaacagta	1140
acaccatttg accaccaaga agcacttccg ttattacgta ttgatgagcc aaccttgcaa	1200
atgactttcg taacaaataa cagtcctttc gctggctcgtg aaggtaaaca cgtaacaagc	1260
cgtaaaattg aagaacgttt acttgcagag cttcaaaccg acgtatcttt acgcgtagag	1320
ccaacagctt cccctgacgc ttgggtagtt tctggctcgtg gtgagcttca tttatccatt	1380
ttgatcgaaa caatgcgtcg cgaaggttat gaattacaag tttctaaacc agaagtaatc	1440
atccgtgaaa ttgatggcgt gaaatgtgaa ccagtagaag atgttcaa attgatactcca	1500
gaagaattca tgggttccgt tattgaatct atcagccaac gtaaaggcga aatgaaaaac	1560
atgattaacg atggcaacgg acaagttcgt ttacaattca tgggtccagc tcgtggctta	1620
atcgggtata caactgattt cctttcaatg actcgtgggt atgggtattat caaccacaca	1680

<210> 414
 <211> 1620
 <212> DNA
 <213> *Listeria innocua*

<400> 414

ataaaaaaac tcattttcag aaaataaaaa tagtgctaaa tccgcttagc tatgctataa	60
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tcttttggtc aatcttcacg ataaatgttt ggatttttaa tttaggagga aacaagattg	180
aatttaagaa acgatattcg taatgtagca attattgccc acgttgacca tggtaaaact	240
acactagtag accaattact acgccaatca ggtactttcc gcgacaatga aacagttgca	300
gaacgtgcaa tggacaacaa tgatttagaa agagaacgcg gtattacaat tttagcgaaa	360
aatacagcaa ttaagtatga agatacacgc gtaaacatca tggatacacc tggacacgcc	420
gattttggtg gagaagtaga acgtatcatg aaaatggttg atggtgttct tttagtagtg	480
gacgcgtatg aaggtactat gcctcaaaca cgttttgtac taaaaaagc actagaacaa	540
aacctaactc caatcgtagt agtaaacaaa attgaccgtg actttgctcg cccagaagaa	600
gttggtgatg aagtactaga attattcatc gaactagggtg cgaacgacga tcaattagaa	660
ttcccagttg tttatgcttc tgcaattaac ggaacttcaa gctttgaatc cgaccagca	720
gaacaaaaag aaacaatgaa accactttta gacactatta ttgaacatat tccagctcca	780
gttgataaca gcgacgagcc attacaattc caagtttctt tacttgatta taatgactat	840
gttggtcgta ttggtattgg ccgcgttttc cgtggaacaa tgcacgtagg acaaacagtt	900
gccttaatta aactagacgg cacagtaaaa caattccgtg taacgaaaat gttcggtttc	960
ttcggactaa aacgtgacga aattaaagaa gcaaaagcgg gtgacttagt agcacttgca	1020
ggaatggaag acatcttcgt cggtgaaaca gtaacaccat ttgaccacca agaagcactt	1080
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gaacttcaaa cggatgtatc tttacgcgtt gaaccaacag cttctccaga cgcattggta	1260
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gaaccagtag aagacgttca aattgatact ccagaagaat tcatgggttc agttattgaa	1440
tctatcagcc aacgtaaagg cgaaatgaaa aacatgatta acgacggcaa tggccaagtt	1500
cgtttacaat tcatgggtcc agctcgtgga ttaatcgtt atacaactga tttcctttca	1560
atgacacgtg gttatggtat tatcaaccat acattcgata gctaccaacc aatccaaaaa	1620

<210> 415
 <211> 1380
 <212> DNA
 <213> *Bacillus cereus*

<400> 415
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 attgtatccc cttcgctctt ataatagaga aggattaaaa agacattagg agttggacat 120
 gttgaaaaaa cgacaagatt tacgtaatat agcaattatt gcccacgttg accatggtaa 180
 aacaacactt gttgaccagt tattacgtca agcggggact ttccgtgcga acgaacacgt 240
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 gcaaaactta actccaatcg tagttgtaaa caaaattgac cgtgacttcg ctcgccaga 540
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 agagttccca gttgtatttg catcagcaat gaacggaaca gcaagcttag attcaaattcc 660
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 ttctgggtatg gaagacatta acgtaggtga aacagtatgt ccagttgaac atcaagatgc 1020
 gttaccatta ttacgtattg atgagccaac actacaaatg acgttccttg taaataacag 1080
 cccatttgca ggtcgtgaag gtaaatacat tacatctcgt aaaattgaag agcgtcttcg 1140
 ttcacaatta gaaacagatg taagtttacg tgtagataat acagattctc ctgatgcgtg 1200
 gatcgtatct ggacgtgggg aactacattt atctatctta attgaaaaca tgcgtcgtga 1260
 aggttatgaa ttacaagtat ctaagccaga agtaatcatt aaagaagttg atggcgtaag 1320
 atgtgagcct gtagagcgcg taaaaatcga tgtacctgaa gaatacactg gttctattat 1380

<210> 416
 <211> 1680
 <212> DNA
 <213> *Bacillus anthracis*

<400> 416

ctatatatttc attcttgatt ttattttaat tgctattgta tcccccttcgc tcttataata	60
gagaaggatt aaaaagacat taggagttgg acatgttgaa aaaacgacaa gatttacgta	120
atatagcaat tattgcccac gttgaccatg gtaaaacaac acttgttgac cagttattac	180
gtcaagcggg gactttccgt gcgaacgaac acgttgaaga acgcgcaatg gattcaaatg	240
atctagaaag agaacgcggt attacaattt tagcgaaaaa tactgcgatt cactatgaag	300
ataaaagaat taacatttta gatacaccag gtcacgctga cttcggtgga gaagtagaac	360
gtattatgaa aatggttgat ggtgtattac ttgttggtga tgcatatgaa gggtgtatgc	420
cacaaacacg atttgtttta aagaaagctc ttgagcaaaa cttaactcca atcgtagttg	480
tqaataaaat tgaccgtgac ttcgctcgtc ctgatgaagt agttgatgaa gtaatcgact	540
tattcatcga acttggtgca aacgaagatc aattagagtt cccagttgta tttgcatcag	600
caatgaacgg aacagcaagc ttagattcaa acccagcaaa tcaagaagag aatatgaaat	660
cattatttga tacaattatt gaacatattc ctgcaccaat tgataacagc gaagagccac	720
ttcaattcca agtagcactt cttgattaca acgactatgt tggacgtatc ggggttgac	780
gcgtattccg cgggtacaatg aagggttgac aacaagttgc tttaatgaaa gtagacggaa	840
gtgtaaaaca attccgcgta acgaaactat ttggttatat gggattaaaa cgtcaagaaa	900
ttgaagaagc aaaagctgga gacttagtag ctgtttctgg tatggaagac attaacgtag	960
gtgaaacagt atgtccagtt gaacatcaag atgcgttacc attattacgt attgatgagc	1020
caacactaca aatgacattc cttgtaaata acagcccatt tgcaggctcg gaaggtaa	1080
acattacatc tcgtaaaatt gaagagcgtc ttcgttcaca attagaaaca gatgtaagtt	1140
tacgcgtaga taatacagaa tctcctgatg cgtggatcgt atctggacgt ggggaactac	1200
atztatctat cttaatcgaa aacatgcgtc gtgaagggtta tgaactacaa gtatctaaac	1260
cagaagtaat cattaaagaa gttgatggcg taagatgtga gcctgtagag cgtgtgcaaa	1320
ttgatgtacc tgaagaatac actggttcta ttatggaatc tatgggtgca cgtaaagggtg	1380
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cacgtggttt aattggttac acaacagaat tcttaacatt aactcgtggt tacggtat	1500
taaaccatac attcgattgc taccaaccag tacacgctgg acaagttggt ggacgtcgtc	1560
aagggtgttct agtttcactt gaaacaggaa aagcatcaca atacggtatt atgcaagttg	1620
aagaccgtgg tgtaatcttc gttgaaccag gtacagaagt atatgctggt atgattgttg	1680

<210> 417
 <211> 1270
 <212> DNA
 <213> *Staphylococcus aureus*

<400> 417
 tcaattatat gatataataa aaaagttgta attaaaagtg ggattttact taagaaagaa 60
 ggaaactatt tatatgacta ataaaagaga agatgtccgc aatatagcaa ttattgctca 120
 cgttgaccat ggtaaaacaa ctttagtaga tgagttgtta aaacaatctg gtatattcag 180
 agaaaatgaa catgtcgatg aacgtgcaat ggactctaac gatatcgaaa gagagcgtgg 240
 aattacgatt ctagccaaaa atacggctgt tgattataaa ggtacacgta ttaatatattt 300
 ggatacacca ggacatgcag actttggtgg agaagtagaa cgtattatga aaatggttga 360
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 aaacgatgaa caattagaat tccctgttgt ttatgcttca gcagtaaagtg gaacagctag 600
 cttagatcct gaaaaacaag atgataattt acaatcatta tatgaaacaa ttattgatta 660
 tgtaccagct ccaattgata acagtgatga gccattacaa ttccaagtag cattgttgga 720
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 cggagataat gtatcactaa ttaaattaga cggtagcgtg aaaaacttcc gtgtaactaa 840
 aatcttttgt tactttggat taaaacgttt agaaattgaa gaagcacaag ctggagattt 900
 aattgctgtt tcaggtatgg aagacattaa tgttgggtgaa actgtaacac cacatgacca 960
 tcaagaagca ttgccagttc tacgtattga tgagcctact cttgaaatga catttaaagt 1020
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 acgttttaaat caacaattag aaacagatgt atctttgaaa gtttctaaca cagattctcc 1140
 agatacatgg gtagttgctg gtcgcggtga attgcattta tcaatcctta ttgaaaatat 1200
 gcgtcgtgaa ggttatgaat tacaagtttc aaaaccacaa gtaattatta aagaaataga 1260
 tggtgtaatg 1270

<210> 418
 <211> 1320
 <212> DNA
 <213> *Staphylococcus epidermidis*

<400> 418
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 aatatagcga ttattgcgca tgtcgaccat ggtaaaacaa cattagtaga ccagttgctt 180
 aaacaatcag gtatatattcg tgaaaacgaa catgtcgacg agcgtgcaat ggactctaata 240
 gatttagaaa gagaacgtgg tattacgatt cttgctaaga atacagcgat agattataaa 300
 ggaacgcgta tcaatatatt agacacacct ggccacgccg attttggtgg tgaagttgaa 360
 cgtatcatga aaatgggtga cgggtgcgta ctagtgggtg acgcatatga aggtacaatg 420
 cctcaaactc gttttgttct taaaaagct ttagaacaaa acttaaaacc ggtttagtatt 480
 gtgaataaaa ttgataaacc agctgctaga cctgaggagg ttgtagatga agtattagac 540
 ttattcattg aattggaagc gaatgatgag caattagact tcccagttgt ttatgcttca 600
 gctgtgaatg gaacagcaag tttagactct gaaaagcaag acgaaaatat gcaatcccta 660
 tacgagacga ttattgacta tgtaccggca ccagtagata attcagatga accattacaa 720
 ttccaaattg ctttactaga ttataatgat tatgtaggtc gtataggcgt tggacgtgtg 780
 ttcagaggta aaatgcgtgt aggtgataat gtatcactaa ttaaattaga tggtagcgtt 840
 aagaactttc gtgtgacgaa aatatttggt tactttgggtc ttaaacgtga agaaattgaa 900
 gaagcacaag caggagactt aatagctgtt tcaggtagtg aagatattaa cgttgggtgaa 960
 acagttacac cacatgatca tcgtgaccca ttaccggtgt tacgtattga tgaaccaacc 1020
 ctagaaatga cttttaaagt aaataactct ccgtttgctg gacgtgaagg tgattatgta 1080
 acagctcgac aaattcaaga aagattagat caacaacttg aaacagatgt ttctttaaaa 1140
 gttacaccta ctgatcaacc agattcatgg gttgttgctg gtcgtgggtga actacacttg 1200
 tctattctta ttgaaaacat gagacgtgaa ggctttgaat tacaggtttc taaacctcaa 1260
 gtatttttaa gagaaatcga tgggtgtgta agtgaaccat ttgagcgtgt acaatgtgaa 1320

<210> 419
 <211> 1320
 <212> DNA
 <213> *Bacillus subtilis*

<400> 419
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 taggagatga aaaagtgaaa cttcgaaatg atcttcgcaa catcgcgatt attgcccacg 120

ttgaccatgg gaaaacgact ctagtcgatc agctttttaca tcaggctggg acgttccgtg	180
ccaacgaaca gggttgctgaa cgcgcaatgg actctaataga tcttgaacgc gaacgcggca	240
ttacaatatt ggcgaaaaat actgcgatta actataaaga tacacgtatc aatatttttg	300
acacccctgg acatgcagac tttgggggag aagtagaacg gattatgaaa atggttgacg	360
gcgtagtgct tgtcgttgac gcatatgaag gctgtatgcc tcaaactcgt tttgttctga	420
aaaaagctct tgagcaaac ctgaaccctg ttgttggtgt aaacaaaatt gaccgtgact	480
ttgctcgtcc agaggaagtt atcgatgaag ttctggatct gttcattgag cttgatgcc	540
atgaagagca gctcgagttc ccagtggat atgcttccgc gattaatgga acagcgagtc	600
ttgatccgaa acaacaggat gaaaacatgg aagctttata tgaaaccatt attaagcatg	660
ttccggcacc tgttgataat gcagaggagc cgcttcaatt ccaagttgcc cttcttgact	720
acaacgacta tgtaggccgt atcggaatcg gacgcgtatt ccgcggcaca atgaaagtcg	780
gacagcaggt ttctcttatg aagcttgacg gaacggcaaa gtcattccgt gttacaaaga	840
tttttggttt ccaaggctta aagcgtgtgg aaattgaaga agcaaaagcg ggagacctcg	900
ttgcggtttc cgggatggaa gatatcaacg ttggtgaaac ggtatgtcct gtagaccatc	960
aagatccgct tccggtcctt cgcattgatg agccgacact tcaaatgaca tttgtcgtga	1020
ataacagtcc gtttgacaggc cgtgaaggca aatatgtaac ggcccgcaaa atcgaagagc	1080
gtcttcaatc acagcttcag acggatgtga gcttgcggtg tgagccaaca gcttctcctg	1140
atgcttgggt tgtttcagga cgcggtgagc tgcacttgtc aattttaatt gaaaatatgc	1200
gtcgtgaggg ctatgagctt caagtgtcaa aacctgaagt tattatcaaa gaaatcgacg	1260
gcgtacgctg tgagcctggt gaacgtgtgc aaattgatgt tcctgaagag catactggct	1320

<210> 420
 <211> 1560
 <212> DNA
 <213> Streptococcus mutans

<400> 420	
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tgagctgttg tcttttggtt ttgcaatact gggttgattga ggacttattt tataaaattt	120
ggagatacca agactgcgac tttgctatct tgggttttct tttatatattt aaaacattta	180
catactcttc ctgagttttt ccctaatttt tatggtataa tagataagtt gaaataaatt	240
aatgtaaaat gtaagaggaa ttatgacaaa ttttagagaa gatattagaa atgttgctat	300

cattgcccac gttgaccatg ggaaaacaac ccttggtgat gagctcttaa aacaatcgca	360
tacacttgat gagcataaaa aattagaaga acgtgcatg gactctaata atcttgaaaa	420
agagcgtggg attactattc ttgcaaaaaa tactgctggt gcctacaatg gtgtacgtat	480
taacattatg gacacaccag gacatgcgga ttttggtgga gaagtagagc gtatcatgaa	540
aatggttgat ggggttggtc ttgttggtga tgcttatgaa ggtaccatgc cgcaaacacg	600
ttttgttttg aaaaagctt tggaacaaa cctgggtcca atcgtgggtg tgaataagat	660
tgacaagcca tcagctcgtc cggcagaagt tgttgatgaa gttcttgaa ttttcattga	720
acttgagca gatgatgacc agttagagtt tccagtcgtt tacgcttcgg cgattaatgg	780
aacttcttca ttatcagatg aaccagcgga tcaagaacat acaatggcac ccgtttttga	840
tactattatt gagcatattc cagcaccgat cgataattca gatcagccac ttcaatttca	900
agtgtctctc cttgattata acgactttgt tggacgtatc ggtattgggc gagtcttccg	960
tggttctggt aaagtcgggg atcaagtgc actttctaaa cttgatggta caacaaagaa	1020
ttttcgtggt acaaaacttt tcggtttctt cggtttgaa cgtcgtgaga ttaaggaagc	1080
taaggctggc gatttgattg ctgtttcagg tatggaagat atctttgttg gtgaaacgat	1140
tacaccaact gatgctgtag aaccacttcc tattcttcac attgatgagc caactctgca	1200
aatgaccttt ttagctaaca attccctttt tgcaggcgt gaaggtaaatt ttgtaacctc	1260
gcgtaaggta gaagagcgtt tggtggcaga attgcaaaca gatgtttccc ttcgtgtaga	1320
agccactgac tcaccagata aatggacggt ttcaggtcgt ggggagttac atctgtcaat	1380
ccttattgaa accatgcgcc gtgaaggata tgagctgcaa gtatcgcgtc cagaagttat	1440
tatcaaagaa attgatggca tcaaatgtga gccatttgaa cgcgtgcaaa ttgacacacc	1500
ggaagaatac caaggtgctg ttatccagtc ctttcagaa cgtaaagggtg aaatgcttga	1560

<210> 421

<211> 1259

<212> DNA

<213> Streptococcus pneumoniae

<400> 421

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aatcgttcag ttagaaaata aattttgaat attatagagg aaatcatgac aaaattaaga	120
gaagatatcc gtaacattgc gattatcgcc cacgttgacc acggtaaaac aaccctgggt	180
gacgaattat tgaacaatc agaaacgctt gatgcacgta ctgaattggc agagcgtgct	240

atggactcaa acgatatcga aaaagagcgt ggaatcacca tccttgctaa aaatactgcc	300
gttgcttaca acggaactcg tatcaacatt atggacacac caggacacgc ggacttcggt	360
ggagaagttg agcgtatcat gaaaatggtt gacggtgttg tcttggtcgt agatgcctat	420
gaaggaacca tgccacaaac tcgtttcgta ttgaaaaaag ccttggaaca agaccttgtc	480
ccaatcgtgg ttgttaacaa aatcgataag ccatcagctc gtccagcaga agtagtggat	540
gaagtcttgg aacttttcat cgagcttggg gcagatgacg accagcttga tttcccagtg	600
gtttatgctt cagcgatcaa cggaacttct tcattgtcag atgatccagc tgaccaagaa	660
gcgactatgg caccaatctt tgacacgatt atcgaccata tcccagctcc agtagataac	720
tcagatgagc ctttgcagtt ccaagtgtca cttttggact acaatgactt cgttggacgt	780
atcggtatcg gtcgtgtctt ccgtggtaca gttaaggttg gggaccaagt taccctttct	840
aaacttgacg gtacaactaa aaacttccgt gttacaaaac tcttcggttt ctttggtttg	900
gaacgtcgtg aaatccaaga agccaaagcg ggtgacttga ttgccgtttc aggtatggaa	960
gacatctttg tcggtgaaac catcactccg acagatgcag tagaagctct tccaatccta	1020
cacatcgatg agccaactct tcaaatagact ttcttggtca acaactcacc atttgctggt	1080
aaagaaggta aatgggtaac ttctcgtaag gtggaagaac gcttgcaggc agaattgcaa	1140
acagacgttt cccttcgtgt tgacccaact gattcaccag ataaatggac tgtttcagga	1200
cgtggagaat tgcacttgtc aatccttata gaaacaatgc gtcgtgaggg ctatgaact	1259

<210> 422

<211> 1860

<212> DNA

<213> Streptococcus agalactiae

<400> 422

agaaatgaat taaattgaaa aaagtagaaa ataaatggca taaataatga aatgatgaaa	60
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tttttaagaa aaattgtggt ataattcata agttaacaga attacattat aaaatagagg	180
aaaacatgac aaatttaaga acagatatcc gtaacgttgc gatcattgcc cacgttgacc	240
acggtaaaac aactctcggt gatgaattat taaaacaatc acatactctt gatgagcgta	300
aagagcttga agaacgtgca atggattcaa atgatatcga aaaagaacgt ggtatcacca	360
ttcttgcaaa aaatacagcc gtagcataca acgatgttcg tatcaatatt atggacacac	420
ctgggtcacgc ggactttggt ggtgaagttg agcgtattat gaaaatggtt gatggtgttg	480

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gtccatcaga	ggttggtgat	gaagttcttg	aactatztat	tgagctcggg	gctgatgatg	660
atcaactaga	tttccttggt	gtttatgctt	cagctatcaa	tggaacatct	tcaatgtcag	720
atgatccttc	agatcaagaa	aaaacaatgg	caccgatttt	tgatactatc	attgatcaca	780
ttccagcccc	agttgacaac	tcggaagaac	cacttcaatt	ccaagtttct	cttcttgatt	840
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gagatcaagt	tactctttca	aaacttgatg	gtacaactaa	aaacttcogc	gtaacaaaaac	960
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ataattcacc	atttgcaggt	cgcgaaggta	aatggattac	gtcacgtaag	gttgaagaac	1200
gtcttttagc	agaattacaa	acagacgttt	ctttacgtgt	tgaccaaca	gattcgccag	1260
ataaatggac	ggtttcaggg	cgtggagaat	tacatttatc	tatccttatt	gaaacaatgc	1320
gtcgtgaggg	atatgaactt	caagtatcac	gtccagaagt	tatcatcaaa	gaaattgatg	1380
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gtaaagcaac	tacatattca	attatgcgta	ttgaagaacg	tgggactatc	tttgtaaatac	1740
caggtataga	agtttatgaa	ggaatgattg	ttggtgagaa	ttctcgtgat	aatgacctcg	1800
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<210> 423

<211> 1500

<212> DNA

<213> Streptococcus pyogenes

<400> 423

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gtaacgtgga	gttaagggga	ataaaggcag	tcaactgtctc	aaaaacctta	attccttttt	120
------------	------------	------------	-------------	------------	------------	-----

ttgctgtatc cagacttgct gaaagtctga aaatatttac aattgattaa aaccagtttt	180
ttaaaacatt ttgtgttata cttatctagt taaaatatat ttacttagag gaacaaatga	240
ctaacttaag aaacgatatc cgtaacgtag cgattattgc ccacgttgac cacggaaaaa	300
caacacttgt agatgaatta ttaaaacaat cccatactct tgatgagcgt aaagagcttc	360
aagagcgtgc catggattcc aatgaccttg aaaaagaacg tgggattaca atccttgcca	420
aaaatacggc agtagcctat aacgatgttc gtattaacat catggatacc ccaggacacg	480
cggacttcgg tgggtgaagtt gaacgtatca tgaaaatggg tgacgggggtt gttcttggtg	540
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tcttcgggtt ggaacgtcgt gaaattcaag aagctaaagc aggtgacttg attgctgttt	1080
caggtatgga agatatcttt gttggagaaa ccattacacc aactgactgt gtggaagctc	1140
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cttttgcagg tcgtgaaggt aaatggatca cgtcacgtaa ggttgaagaa cgtcttttag	1260
cagaattgca aacagacgtg tcacttcgtg ttgacccaac agattcgcca gataaatgga	1320
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gctatgaact tcaagtatca cgtccagaag ttatcatcaa agaaattgat ggtgtcaa	1440
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<210> 424
 <211> 1740
 <212> DNA
 <213> Enterococcus faecalis

<400> 424	
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ttggaaatta ttgctatggt aaaaggcaac catcatggct atttatctaa tctaagtcct	120

tgggattatg cagcaggctt agtacttttg gaagaatttg ggtttaaata ctctgggtatt	180
acaggaaaac cattaacttt tgcgggtcgt gaatacttta ttgcagcaac tcctgaaacc	240
tatgatgaag tatttaccog atatttaaata gaatcgggaat aatcaaagaa gagcgttgct	300
gaaaggtaag gctcttctc ttttaaaga gaaaaatttg taaaaaatg tccttgtttt	360
cagaaaaagc cgaataattt ctaaaacttt cattattttt gcaggcgaaa gccttttttt	420
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aattattgaa catgtgccag ctccagttga caattcagac gaaccacttc aattccaagt	1140
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cacaatgaaa gtcggcgacc aagttgcgtt gatgaaatta gatggcagcg tgaaaaattt	1260
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agatgttcac aatcaagaag cattaccaat tctacacatt gatgagccaa ccttacaat	1440
gactttctta gttacaatt ctccatttgc gggacgtgaa ggaaaataca tcaccgctcg	1500
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aattggccca gattcttggc ctgtatcagg tcgtggcgaa ttgcatttat caattttaat	1620
tgaaaacatg cgtcgtgaag gctatgaatt acaagtttct cgtccagaag ttattgaacg	1680
tgaaattgat ggagttaaatt gtgaaccatt tgaacgtgtt caaattgaca cacctgaaga	1740

<210> 425
<211> 1620

<212> DNA

<213> *Lactococcus lactis*

<400> 425

cgaaaaagca agttaaatat gttgtaaata atggtgttac attagataat actagtgggtg	60
ggcctaattt ggctgcacct gtgacggtgg atagtcaggt aatttcgaac gataaaggta	120
cgattatggg tgtaaggacc tatacagcag atttaagcca agcagaagta gttaaaaaag	180
tgggtaattt gaatgcaatg tcctttggag aattttgggg taaaaaagtt tttgctgcc	240
gccaaaatca gacaaattca gataagactt attctgttac gtttaactg aatataaatt	300
ggatagtatc taatggctat gcttcgctaa caaaagtaac aggtggctat gggtccttgc	360
ttgaccatgt ttatgttgct aattctagt ttactactgc aacgaatgg cagattaaag	420
gttcaagtgg ttatactcaa caagttgatg acaaatcaga agggaaatag ttatcgtgg	480
caattacgcg aaactataaa cctgtaaaag ttccagcaag tggggcaaat gtaggagcta	540
cgtattttgc cacacttaaa cggggaaata gtacatggaa attccaaaca acaaatagag	600
cttattaagt gggaggaagt ggaatgaata taaaaggcat aaaaatttgg caagtatttc	660
ttgcattcat catttgata ggaaccatgt ttcttctgc aacggtaaatt caggctaaat	720
tgaatacgaa ttttgactat aaaaaaagtc gagaaaattt cttttatttt ctttttcac	780
aagtccttt ttatagtttc attttgggat tgggtgttgc tatatcactt tttctcattt	840
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aacaacataa tcattttttac tgattttatt aattataaaa aaataaagaa ctccttagaa	1140
atttttcttt ggggttttca ttttggaagt aaaaaaatct ttgttaggct tgtaaacgtg	1200
tgcatttaca gcttttagaa aagtgtgcta taatgggtta gatataacg aaagtaaggt	1260
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cgtaaagaat tagctgaacg tgcgatggac tcaaatgcac ttgagcaaga acgtgggatt	1440
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acaccaggtc acgcggactt cgggtggagaa gttgaacgta ttatgaaaat ggttgatggg	1560
gttgtcctcg ttgtcgatgc ttatgaagga acaatgcctc aaacacgttt tgttttgaaa	1620

<210> 426
 <211> 670
 <212> DNA
 <213> *Citrobacter freundii*

<400> 426
 atctggtaca acaatttctt cggtgctgaa accgaagcga ttctgccgta cgaccagtat 60
 atgcaccggt tcgcggccta cttccagcag ggcaatatgg aatccaatgg taaatacgtt 120
 gaccgtaacg gcaatgcggt ggattaccag acaggcccaa tcatctgggg tgagccgggt 180
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 gatttcacgc ctccggcaat caccacaaac ccgctgtcgg atcaccatcc gaaactgctg 300
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 gtgttcgaag gtaaccgtcc aactaactcc atcctgctgc gcgaaatcac accgttcagc 480
 ctgggtgcgc tgattgcgct gtacgagcac aaaatcttca ctcagggcgc gatcctgaat 540
 atcttcacct ttgaccagtg gggcggtgag ctgggcaaac agctggcgaa tcgcattctg 600
 ccagagctga atgatgataa agaaatcacc agccatgatt gctcaactaa cggtttgatt 660
 aaccgctata 670

<210> 427
 <211> 670
 <212> DNA
 <213> *Klebsiella pneumoniae*

<400> 427
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 atgcaccgct ttgcgctta cttccagcag ggcaacatgg agtccaacgg taagtatggt 120
 gaccgtaacg gccacgcggt agactaccag actggcccaa tcatctgggg tgagccgggc 180
 accaacggtc agcacgcggt ctaccagctg atccaccagg gcacccaaaat ggtaccgtgc 240
 gatttcacgc ctccggctat caccacaaac ccgctgtctg accaccatca gaaactgctg 300
 tctaacttct tcgcccagac cgaggccctg gccttttggtta aatcccgca agtggttgag 360
 caggaatata gcgatcaggg taaagaccgc gcgaccctgg agcacgtggt gccgttcaaa 420
 gtgttcgaag gtaaccgccc gactaactcc atcctgctgc gcgagattac cccgttcagc 480
 ctcggggcgc tgattgccct gtacgagcac aaaatcttca cccagggcgc gatcctcaac 540

atcttcacct ttgaccagtg gggcggtgag ctgggcaaac agctgggctaa ccgcatcctg 600
 ccggagctga aagacggcag cgaagttagc agccacgaca gctctactaa cggcctgatt 660
 aaccgctata 670

<210> 428
 <211> 670
 <212> DNA
 <213> *Klebsiella oxytoca*

<400> 428
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 atgcaccgct ttgccgccta cttccagcag ggcaacatgg aatccaacgg taaatacgtt 120
 gaccgtaacg gcaacgcctt ggattaccag acggggccga tcatctgggg cgagccgggc 180
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 ccggagctga aggatgggtc tgaagtcagc agccacgaca gctccactaa cggcctgatt 660
 aaccgctata 670

<210> 429
 <211> 670
 <212> DNA
 <213> *Escherichia coli*

<400> 429
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 gaccgtaacg gtaacgctgt ggattaccag actggcccaa tcatctgggg cgagccaggc 180
 actaacggcc agcatgcgtt ctatcagctg atccaccagg gcacccaaat ggttccgtgc 240
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cctgaactgg gtgacgataa cgcgattaac agccacgaca gctccacaaa tggctctgatt 660
aaccgctata 670

<210> 430
<211> 501
<212> DNA
<213> *Serratia marcescens*

<400> 430
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atttggtaca acaacttctt tggcgccgaa accgaagcca ttctgccgta cgatcagtac 120
atgcaccggt ttgccgctta cttccagcag ggcaagatgg aatccaacgg caagtacgac 180
gatcgcaacg gcaaccgggt ggattaccag accggtcccg tcatttgggg cgagccgggc 240
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gatttcacgc cgccggccat cagccataac ccgctgggcm atcatcacgc caaactgctg 360
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gccgagttcg cggcgccagg caaaactcct gagcaggtea agcacgtggc gccgttcaag 480
gtgtttgaag gcaaccggcc g 501

<210> 431
<211> 1103
<212> DNA
<213> *Neisseria gonorrhoeae*

<400> 431
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gatgggcggc cagaccgcgc tgaactgtgc gctggatttg gcgcgtaacg gcgtgctggc 180
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cggccgcttt aaagaagcga tggaaaaaat cggcctctct tgcccgaat cttttgtctg 300
ccacaccatg aacgaagcct tggcggcgca agaacaggtc ggctttccga cgctgattcg 360
tccgtctttc acgatgggcm gttcgggcm cggcattgcc tacaataagg atgagttttt 420


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ggcgatttgc gaacgcgggtt tcgatgcgtc gcctacgcat gagctgctga ttgagcagtc 480
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<210> 432
<211> 1036
<212> DNA
<213> Serratia marcescens

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<220>
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<222> (4)..(4)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (6)..(6)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (994)..(994)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (1025)..(1025)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (1030)..(1030)
<223> n is a, c, g, or t

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<400> 432

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tctgccgacc atgggtggcc agactgcgct gaactgtgcg ctggagctgg agcgtcaggg	180
cgtgctggaa gagttcggcg tgaccatgat tggtagcacc gccgacgcga ttgataaagc	240
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gggtnactcn aaaaaa	1036

<210> 433
 <211> 1111
 <212> DNA
 <213> *Citrobacter freundii*

<400> 433	
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catgggcggt cagacggcgc tgaactgtgc gctggagctg gaacgccagg gcgtactggc	180
tgaattcggc gtgaccatga ttggcgcaac ggccggatgcc attgataaag cggaagaccg	240
tcgtcgcttt gatatcgcg tgaagaaaat tggctctcgac accgcgcgct ctggcatcgc	300
tcacaccatg gaagaagcgc tggcggttgc tgctgacgtg ggcttcccgt gcatcatccg	360
accgagcttc accatgggcg gcaccggcgg cggtatcgct tataaccgtg aagagttcga	420

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agagatttgc gaacgcggtc tggacctttc cccaaccaac gagctgctga ttgatgaatc 480
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catcgtctgc tccatcgaaa acttcgacgc gatgggcatc cataccggtg actccatcac 600
cgtagcacct gcccagacgc tgaccgacaa agaatatcaa atcatgcgta acgcctcgat 660
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cacactggcg gccgttacta gtggatccga gctcgggtacc aagcttgatg catagcttga 1080
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<210> 434
<211> 1125
<212> DNA
<213> Enterobacter aerogenes

```

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<220>
<221> misc_feature
<222> (3)..(3)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (6)..(6)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (341)..(341)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (366)..(366)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (368)..(368)
<223> n is a, c, g, or t

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<220>

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<221> misc_feature
 <222> (1083)..(1083)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (1124)..(1124)
 <223> n is a, c, g, or t

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 gtgttggaag agttcggcgt gactatgatt ggtgcgaccg ccgatgcgat tgataaagca 240
 gaagaccgcc gtctgttcga cgtacgcatg aagaaaattg gtctggaaac cgcgcgttcc 300
 ggtatcgcac acacgatgga agaagcgctg gcggttgccg ntgactgggc ttcccgtgca 360
 ttattngncc catcctttac catgggcggt agcggcgggc gtatcgctta taaccgcgaa 420
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 ccactactgt cgcgccagcc caaacgctga ccgacaaaga atatcaaacc atgcgtaacg 660
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 attccagcac actggcggcc gttactagtg gatccgagct cggtagcaag cttgatgcat 1080
 agncttgagt attctaacgc gtcacctaaa taggctggcg taanc 1125

<210> 435
 <211> 1118
 <212> DNA
 <213> Enterobacter cloacae

<220>
 <221> misc_feature

<222> (1078)..(1078)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (1089)..(1089)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (1108)..(1108)
 <223> n is a, c, g, or t

<400> 435
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 tgagtattnc taacgcgtca cctaaatngt ctggcgaa 1118

<210> 436
 <211> 1110
 <212> DNA
 <213> *Morganella morganii*

<400> 436

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<210> 437
 <211> 1380
 <212> DNA
 <213> Escherichia coli

<400> 437

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accgtctgac cactcagatg aaatcggttg gcgaagtgat ggcgattggt cgcacgcagc 1260
aggaatccct gcaaaaagcg ctgcgcggcc tggaagtcgg tgcgactgga ttcgaccoga 1320
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<210> 438
<211> 1120
<212> DNA
<213> *Proteus mirabilis*

<220>
<221> misc_feature
<222> (8)..(8)
<223> n is a, c, g, or t

<400> 438
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tattaccgac aatgggcgga caaacggcat taaactgtgc cttagaatta gagcgtcaag 180
gggtgttaac tgaatttggc gtaacaatga taggtgcaac ggctgatgct attgataaag 240

cggaagatag acaacgcttt gataaagcga tgaaaaaat tggctcggat acggctcggt 300
 caggcatcgc tcatactatg gacgaagcat ttgcagtggc tgagcaagtg ggtttccctt 360
 gtattattcg cccttcattt actatggggg gaacgggagg cgggatcgcc tataatcgtg 420
 aggaatttga agaaatttgt actcgagggt tagatttatc accgacaaat gaactattaa 480
 ttgatgaatc attaattggc tggaaagagt atgaaatgga agtggtgcgc gataaaaatg 540
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 gctcatcagc attagcgtca aaagcaacag gtttcccaat tgcaaaagtc gcggcaaaac 840
 ttgcagtagg ttataccctc gatgagttga tgaatgatat cactggagga agaaccaccag 900
 cctcttttga accttctatt gattatgtag tgactaaaat ccctcgcttt aactttgaaa 960
 aatttgccgg taccaatgac cgtttaacca cgcaaatgaa gtccgtaggc gaagtaaggg 1020
 cgaattccag cacactggcg gccgttacta gtggatccga gctcgggtacc aagcttgatg 1080
 catagcttga gtattctaac gagtcaccta aatgctggcg 1120

<210> 439
 <211> 1112
 <212> DNA
 <213> *Proteus vulgaris*

<220>
 <221> misc_feature
 <222> (745)..(745)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (761)..(761)
 <223> n is a, c, g, or t

<400> 439
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 attcattggc aagtcgtcag aaaaattatt gaaaaagagc gccctgatgc gattttgcc 120
 acaatggggg ggcaaacggc attaaattgc gcattagaat tagaacgtca aggtgtgtta 180
 gctgaattcg gtgtgaccat gattggtgct acggccgatg ctatcgataa agcagaagat 240
 agacaacgct ttgataaagc aatgaaaaaa atcggcttag gcacagctcg ctcagggtatt 300

gctcataatc tagaagaagc ttttgccgctc gctgaagatg tccgattccc ttgcatcatt 360
cgctccttcat ttactatggg cggcacgggg ggcggtatcg cttataaccg tgaagaatct 420
gaagaaatct gtactcgtgg attagattta tcaccgacta acgagttatt gattgatgaa 480
tcacttattg gttggaaaga gtatgaaatg gaggtggtgc gcgataaaaa cgacaactgc 540
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gacccaaac aggacgctta attgntattg agatgaatcc ncgtgtttca cgttcatcag 780
cgctagcgtc aaaagcgaca ggatttccta tcgctaaaat agcggcaaaa ctggctgtgg 840
gttataccct tgatgagtta atgaatgata tcactggcgg tagaacgcct gcctcttttg 900
agccttctat cgattatgtg gtaacaaaaa ttctcgatt taattttgaa aaattcgag 960
gtactaatga cagattagcc acacaaatga aatccgttgg cgaagtaagg gcgaattcca 1020
gcacactggc ggccgttact agtggatccg agctcggtac caagcttgat gcatagcttg 1080
agtattctaa cgcgtcacct aaatggctgg cg 1112

<210> 440
<211> 1260
<212> DNA
<213> *Neisseria meningitides*

<400> 440
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ataaagtcac tttggtgaat tccaaccccg ccacgattat gaccgacct gaaatggcgg 180
atgttaccta catcgagccg attatgtggc agacggtgga gaagattatc gccaggagc 240
ggcctgatgc gattctgccc acgatgggcg gtcagaccgc gctgaactgt gcgctggatt 300
tggcacgcaa cggcgtgctg gcaaaataca atgtcgagct gattggcgcg acggaagacg 360
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gcgataagaa cgataactgc atcatcattt gctcgattga aaacttcgac ccgatgggcg	720
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aaatcatgcg taatgcttcg ttggcagtat tgcgcgaaat cggcgtggac acgggtggct	840
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tggcggcgaa actggcggtc ggctttacgc tggacgagtt gcgcaacgac atcaccggcg	1020
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tcgcgtttga aaaattcccc gccgcagacg accgcctgac tacgcagatg aaatcgggtg	1140
gcgaagtgat ggcgatggga cgcacgattc aggaaagttt caaaaagcc ctgcgcggct	1200
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<210> 441
 <211> 1103
 <212> DNA
 <213> *Klebsiella oxytoca*

<400> 441	
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accatgggcg gccagacggc gctgaactgc gcgctggagc tggagcgtca gggcgtgctg	180
gccgagttcg gcgtgaccat gattggcgcg accgccgacg cgattgataa agccgaagac	240
cgccgcggtt tcgacgtggc gatgaagaaa atcgggtctcg ataccgcgcg ttccgggtatc	300
gcgcatacca tggaagaagc gctggcggtt gccgctgaag ttggcttccc gtgcatcatc	360
cgtecgtect ttacgatggg cggcaccggc ggcggtatcg cctacaaccg cgaagagttc	420
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ccgtggcgcc ggcgagacc ctgaccgaca aagagtacca aatcatgcgt aacgcctcga	660
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agccgtccat cgactacgtc gtgaccaaaa tcccacgctt caactttgaa aaattcgtcg 960
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 agtattctaa cgcgtcacct aaa 1103

<210> 442
 <211> 1117
 <212> DNA
 <213> Legionella pneumophila

<220>
 <221> misc_feature
 <222> (1077)..(1077)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (1088)..(1088)
 <223> n is a, c, g, or t

<400> 442
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 cgatgggagg acaaacagcc ttaaacagcg ccttggactt ggtaagagaa ggggtattag 180
 ccaagtactc tgttgaaatg ataggagcga cgcgtgaagc catagacagg gcggaagata 240
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 ggcccttcatt taccatgggt ggtagtggag gcggtattgc ctataatcgt gaagaatttg 420
 aagaaatttg cattagagga ttggagttgt cgccaactca cgagcttttg attgatgaat 480
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 ttattgtttg tactatagag aattttgacc ctatgggagt gcatactgga gattccatta 600
 ccgttgctcc ggcacaaaca ttaactgata aagaatacca acggatgcgg gatgcggcga 660
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 ctttggcgtc aaaagcaacc ggttttccta ttgctaaggt cgcagctaaa ttggctgtgg 840
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aaactccaga tactcttacc acacagatga aatcagtcgg cgaagtaagg gcgaattcca 1020
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gagtattnct aacgcgtcac ctaaatagct ggcgaaa 1117

<210> 443
<211> 1800
<212> DNA
<213> Pseudomonas aeruginosa

<400> 443
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ccggacggtt gcaggacgat acgcatacgt cgatcccgag gctcgaccag agggcgtcga 180
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caccgcgctg ctccagctgg gcgatgaaat cgcggagatc cttgaacgtc attggcctaa	1620
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cggcattcgg tcaactgctg ctggcgatcc tcgagtcgtc gaggtctgt agcatcggt	1740
cgaacaaagg cccgagttca tgggccccct gggtcgaaag gtggttgta tccatgtaca	1800

<210> 444
 <211> 1800
 <212> DNA
 <213> *Pseudomonas syringae*

<400> 444	
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aggttacacg catcagtcta ttcccactg agtccagatc tcgtccaccc ggcgcggtgt	180
ggcttcgtcc ttgacgatcg ccttgcccca ttgcgggtg gtttccctg gccatttggt	240
agtggcatcc aggccattt ttgatccaa tccagacacc ggagaggcaa aatcgaggta	300
atcgatgggc gtggtgtcga tcatgaccgt gtcgcgcttg gggccatgc ggggtgtgat	360
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 aaaaaatggg gccccgaagg acaccatttt ttgagccagc ctgtctgtta cttgcgtttc 1740
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<210> 445

<211> 1862

<212> DNA

<213> Bordetella parapertussis

<400> 445

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aggcaaaaca gaggttaaca tctgcctcct ctcatccac gcaggaggtc ccatgcccga	1800
tgcgtcagtg gccggcctgt tccgacagct ggcccaagga gtgcaccacc atctcgccga	1860
at	1862

<210> 446
 <211> 1860
 <212> DNA
 <213> *Neisseria meningitides*

<400> 446	
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gtaaaacctt caacccaat tcctcccaaa tctcatcaat cttagccgta accgcagggt	180
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ccaaacccat	tttgccgcca	agtccgctga	cggggctggc	gaagtcgagg	tagtcgatgg	300
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<210> 447
 <211> 1800

<212> DNA

<213> *Shigella flexneri*

<400> 447

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gaacgaccag acgcccata tgacgcgctt cgcgtgtccg gcgtactgtt ttttgatcgt	540
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<210> 448
 <211> 1800
 <212> DNA
 <213> Escherichia coli K12

<400> 448	
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gatgggacgt ccccatcac gctgggtttc ccccgcccat ttattcgtgg catccagccc	420
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gttccagtcg cgtgcgttaa cgtcatcatc gcaaacgac acaaatctag tgtacataaa	600
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cggatccacc gggagcgtga tacgttttag ctcaccctgc tgttcaagca gcgtcaagaa	1740
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<210> 449
 <211> 1800
 <212> DNA
 <213> Escherichia coli

<400> 449	
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ggccgcgtct ggacagatgc ggacacgata tacggtatcc gtgatagctt ctaccgaggt	180
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<210> 450

<211> 1500

<212> DNA

<213> *Bordetella bronchiseptica*

<400> 450

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ccggacaccg gcgaggcgaa atcgaggtaa tcgatcggcg tgttctcgac cagcacctg	180
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ccttcgaggg ccatttcgta gccggtggcc gggggcgggt tggcgccctc gggcaccgcg	660
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gtgccgaaca ggttggccag caccggcatg tcggccggcg cgtcgttgtg gcgggcgttc	1380
togaacagca gggccgggccc gccggcgcg agcaccgggt cggcaatctc ggtcatttcc	1440
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<210> 451
 <211> 1440
 <212> DNA
 <213> Bordetella pertussis

<400> 451	
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ttctcgacca gcaccgtgtc gcgcacgggg tccatgcgcg tggatcatggc ccagaccact	180
tcgggtccagt cgcgcgggtc gatgtcttcg tcgaccacca cgatgaactt ggtgtacatg	240
aactgccgca gcacgtcca caggccgaac atcacgcgt tggcgtaggc ggcgtactgc	300
ttgcggatcg acaccaccgc caggcggtag ctgcagcctt ccgggggcag gtagaaatcg	360
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<210> 452
 <211> 1050
 <212> DNA
 <213> Haemophilus influenzae

<400> 452	
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caacaataaa gtcagagctg atttgaatat ctgggcgcac agcacgaagt ttacgaataa	180
tggatttata ttctaatgcg gtatgagcac gtttcatcat tgtaataca cggtcagaac	240
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<210> 453
 <211> 1425
 <212> DNA
 <213> Pasteurella multocida

<400> 453	
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cgtgccaca aaattgacga tacgattagt ttctgtacgc cctgtgagtt ccattaaatc	240
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<210> 454
 <211> 1260
 <212> DNA
 <213> Haemophilus ducreyi

<400> 454	
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tgtgaaaaga ctttttcttg tgctttttca cgaattgagc aagtattcaa taataaaata	900
tccgcttctt caggtttata gggttaattct aatccgtgtg ttgagtttaa gagatctgcc	960
atttttgatg agtcatactc attcatttgg caaccccaag ttgtgatatg taattttgcc	1020
ataattttca aaaaataata aatatctcaa taagttaaaa taaaagcgta aagagacagt	1080
tccctttacg catctttaat cgtgctattc tacctgtttg cttatttttt cgctagagtt	1140
aatcgcttaa taagcaaaat gccacgatat tgctagcgtg acattttatc atgagaggat	1200
gttattgttt gggttaaggtc aatacaacac tttcaccggc aacaacattt ccaacttttt	1260

<210> 455
 <211> 1080
 <212> DNA
 <213> *Vibrio parahaemolyticus*

<400> 455
 aggacgcgct ttacgtagtt tacggatgat cgacttgtag tcgatatgctg tgtgaggacg 60
 cttcatcatc gttagaatac ggtcactacc actttgtact ggcagggtgta ggaaactcac 120
 aagctccggg gtatcttcgt aaaccgcgat gatgtcgtct gtaaaactcta gcgggtggct 180
 agtcgtgaaa cgaatacggg cgataccatc gatagatgca acgagacgaa gcagttcagc 240
 aaaagagcag atctcgccgt cgtgcatagg gccacgggat gcgtttacgt tttgacctag 300
 taggttaact tcacgtacac cttgttccgc tagctgtgca atctcgaata acacgtcatc 360
 cattggacga ctaacttctt caccacgagt gtatggtaca acgcagtaag tgcagtatct 420
 tgaacagcct tccatgatag aaacaaacgc cgtcgacact tctgcacgtg gctcaggtag 480
 gcggtcgaac ttttcaatct ctgggaacga aatgtccatt accggtgcat cgtcagtttg 540
 agattgtttg atcatctcag gtaggcgggtg cagagtttga gggccaaaga tcacgtcaac 600
 gtatggtgca cgctcacgga tgtggtcacc ttcttgtgtt gctacacaac cacctacacc 660
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 tttctcttgc gctttttcac ggatcgaaca ggtgttaagt agaagtacgt ctgcttcctc 780
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 ttcgctcggt cagttgtact taaattggag agctattgct caaattatag ccgccatcac 960
 ggcggttaagc ggcgatttgt actgctttaa aaagcacctg actagtgatc tgacgaattc 1020
 tctgcaaacc ctgatgaaat ctagtttttt gccctatata cagcaagggt ttttggttaa 1080

<210> 456
 <211> 1473
 <212> DNA
 <213> *Yersinia pestis*

<400> 456
 gaatttacca atcatgtcgg gtgaaccctc aaagttcacg acgcggttgt tttccgtacg 60
 cccggccagt tccatgacat ttttgcgaga ggtaccctcc accaaaacac gctgtactgt 120
 ccctaccatc ttacggctaa tttccatcgc ctgttggcta atgcgttggt gcaggatatg 180

tagccgctgt tttttctcct cttcggacac attggtgggt aaatcagccg ctggtgtgcc 240
gggacgcggg gagtaaataa agctgtagct ggtatcaaaa tgaatatctg cgaccagttt 300
catggtctgt tcaaaatcct gctgggtttc accaggggaag ccgacaataa aatcagaact 360
tatctggata tcagggcgtg cttgacgcag tttgcggatg atggctttgt attccaaggc 420
ggtatgggca cgcttcatca tgggtcaaaat acggtcagaa ccgctttgta ccggcaaatg 480
caggaagctc accaattcag gcgtatcgcg ataaacatca atgatatcgt cagtaaactc 540
aatgggggtg ctggtggtaa atcgtaccct atcgatacca tcaatcgccg caaccaaagc 600
caacagctcg gcaaaactac agatatcgcc atcgtaggtt gccccgcggg aggcgttaac 660
attctggccg agtaagttga cttcacgtac gccttgagcg gctaactggg cgatttcaaa 720
aagaatgtca tcgcttggac ggctgacttc ctgcctcgg gtgtagggta cgacacagaa 780
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tggttctggc aaacgggtcaa atttttcaat ttcgggaaaa ctgatatcca cgacagggt 900
attcgttcct tgcacgtggg taatcatttc cggtaaacga tgcagcgttt gtggcccgaa 960
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accaccgacc ccaataatca actgcgggtt tttctctttc aataatttcc attgccctag 1080
caggctgaat actttttcct gtgctttttc ccgtagagaa caggatatta gcagcagtaa 1140
atccgcttct tccgggatgg tggttaactg gtagccatgg gtactggcca agagatctgc 1200
cattttagat gaatcgtatt cattcatctg gcaaccccag gttttgatat gcagtttttt 1260
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ataatctccg ttgtagtaga gagtcgcaaa ggcttcgctg ttagggagca ttgtagtcat 1380
ttgcctctgc gatgaccacc gcagaaccgt tgagttattc tgttgagtga taaaaaatcc 1440
gttacactgc ggtagacaa aaccttgcta atg 1473

<210> 457

<211> 1440

<212> DNA

<213> *Salmonella typhimurium*

<400> 457

gccgagcata cggcggctcc atgccatgc ctgctgattg atacgctctt gcagaatata 60
cagacgtgc ttcttctctt cttccggcac gtcacaaacc atatcggcag ccggcgttcc 120
cggacgcgca gagaagataa agctgtagct catatcaaag ttgacgtcag cgataagctt 180

catggttttt	tcgaaatcat	cggtagtttc	gccaggggaat	ccgacgataa	agtcagagct	240
tatctgaatg	tccggccgcg	ccgcgcgcag	tttacggatg	attgctttat	attccagcgc	300
agtgtgggtg	cgccccatca	gattcaacac	gcgatcggaa	ccgctctgta	ccggcagatg	360
caggaaactg	accagttccg	gcgtatcgcg	gtatacctcg	ataatatcgt	cggtgaactc	420
aatcggatgg	ctggtggtaa	agcgaatacg	gtcaatgccg	tcgatggcgg	caaccagacg	480
cagcagatcg	gcaaaggtac	cggtggtgcc	gtcgtagttt	tctccgcgcc	aggcgттаac	540
gttctggccc	agcaggttga	cctcacgcac	gccctgcgcc	gctaactggg	cgatttcgaa	600
caggatatcg	tctgagggac	ggctgacttc	ttcaccgcgg	gtatacggta	ccacacagta	660
agtacaatat	ttattgcagc	cttccatgat	agaaacgaaa	gcggtcgggc	cttctgcgcg	720
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gcggtcgcca	cgcacggagt	taatcatctc	cggtaggcgg	tgtaaggttt	gcggggccaaa	840
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gccgccgacg	ccgataatca	gatcgggatt	tttctctttt	aacagtctcc	agcgacctaa	960
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catcttcgat	gaatcg tact	cgttcatctg	acagccccag	gttttaatat	ggagtttttt	1140
agtcatcgac	ttgtctttgc	gaaatagtgg	ctgaaaagca	gggcgcatag	tgtaatgctt	1200
tggcgcgggt	gtgaccagta	tgactgacgt	cagcccta at	gggtaaaaaa	tcctgtaaac	1260
tt'gtctaaaa	cgtaacagga	tgaatgacca	tgacaaatca	accaacggaa	attgccattg	1320
tcggcggggg	aatggtcggc	ggcgcgctgg	cgctgggtct	ggcgcagcaa	gggttttacgg	1380
tgatggtaat	agaacatgcc	gcgcctgcgc	cgtttgtggc	ggacagccag	cctgacgtgc	1440

<210> 458
 <211> 1216
 <212> DNA
 <213> *Vibrio cholerae*

<400> 458	
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gggtgtgcct	ggacgaggtg
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gatcagcttc	atgggtgtctt
	120
ggaaatcttt	gtcggtttcc
cctgggaagc	caacgataaa
atcagagctg	atttgaatat
	180
ctgggcgtgc	tttacgtagc
ttacggatga	tggatttgta
ctcaatcgcc	gtatgtggac
	240

gottcatcat agtcagaatg cgatcgctcc cactttgtac tggcaagtgc aggaagctca	300
ccagctcagg cgtgtcttcg tacactgcaa taatgtcatc ggtaaattcg agtgggtggc	360
tagtggtaaa gcggatacga tcgatgccgt caatgggtggc gaccaaacgc agtaattcag	420
cgaaagagca aatgccgcca tcgtgagtgg caccacggtg agcgttgacg ttttgaccca	480
gcaggttaac ttcacgcacc ccttgctcgg caagctgagc gatctcgaac aggacatcgt	540
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ttgagcagcc ttccatgata gaaacgaacg ccgttggggc ttccgcacgt ggctcaggca	660
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gcgattgttt aatcatttct ggcagacgat gcagcgtctg tgggccgaag atgacatcca	780
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cggtattttc tgtcagctca tagccgtttg cagcattaag caggtcagcc attttcgatg	1020
aatcgactc gttcatctgg cagccccaag ttttaattag cagttttcta ctcatctcac	1080
tttcgctcgt tcaatagttc ttcaatcatt tgagctgtag ctacattct agccgccctc	1140
tcggcggtaa gcggcgattt gtactgcttt aaaaaccgac tgactagtaa ttggcggaat	1200
tctcttgtaa cccttg	1216

<210> 459
 <211> 1080
 <212> DNA
 <213> Escherichia coli K12

<400> 459	
tatacagacg ctgcttcttc tcttcttccg gaacatcatc aaccatatcg gcggctggtg	60
tacccggacg tgcagagaag ataaagctgt agctcatgtc gaaattgacg tcggcaatca	120
gcttcatcgt tttctcgaag tcttcggtgg tttcgccagg gaagccaacg atgaaatcag	180
aactgatctg aatatctgga cgcgccgcac gcagtttacg gatgatcgct ttgtactcca	240
gcgccgtatg ggtacggccc atcaggttca gaatgcgac ggaaccgctc tgtaccggca	300
gatgcaggaa gctcaccagc tccggcgtgt cgcgatacac ttcgatgata cgtcggtgaa	360
ttcgatcgga tggctggtgg taaagcgaat acgatcgatc ccgtcgatcg cagcaaccag	420
acgcagcaga tcggcaaacg atccggtggt gccgtcgtag ttttcaccac gccaggcggt	480

cacgttctga ccgagcaggt tgacttcacg cacgccctga gccgcaagct gggcaatctc	540
aaacagaata tcgtcggacg gacggcttac ctcttcacca cgggtgtaag gcaccacgca	600
gtaggtgcaa tatttattgc agccttccat gatggagaca aacgcggtcg gcccttcggc	660
gcgcggttcc ggtagacggt caaacttctc gatttccggg aagctgatat ctacaaccgg	720
gctgcggtcg ccacgcacgg agttgatcat ctccggcaga cgggtgcagcg tttgcggccc	780
aaaaataata tcgacatagt gggcgcgctg gcgaatgtgc tcgccttctt gcgatgccac	840
gcagccaccg acgccgataa tcaggtctgg attcttctct tttaacagtt tccagcgacc	900
caactgatgg aagacttttt cctgagcctt ctgcgggatt gagcaggtgt tcagcagcag	960
cacatccgct tcttccgcca cgtcggtcag ttgatagccg tgggtggcat ccagcagatc	1020
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<210> 460
 <211> 1140
 <212> DNA
 <213> Escherichia coli O157:H7

<400> 460	
catcatcaac catatcggcg gctggtgtac ccggacgtgc agagaagata aagctgtagc	60
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cgcacaggaa gccgacgatg aagtcagaac tgatctgaat atctggacgc gccgcacgca	180
gtttacggat gatcgctttg tactccagcg ccgtatgggt acgtcccatc aggttcagaa	240
tgcgatcgga accgctctgt accggcagat gcaggaaagct caccagctcc ggcgtgtcgc	300
gatacacttc gatgatatcg tcggtgaatt cgatcggatg gctggtggta aagcgaatac	360
gatcgatccc gtcgatcgca gcaaccagac gcaacagatc ggcaaacgat ccggtggtgc	420
cgtcgtagtt ttcaccacgc caggcgttca cgttctgacc gagcaggttg acttcacgca	480
cgccttgagc cgcaagctgg gcaatctcaa acagaatatc gtcagacgga cggcttacct	540
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gaatgtgctc gccttcttgc gatgccacgc agccaccgac gccgataatc aggtctggat	840
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cgcggtattga gcaggtgttc agcagcagca catccgcttc ttccgccacg tcggtcagtt	960
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gacagcccca ggtttttaata tggagttttt tggatcatga cttgctcttg cgaaatagta	1080
gccaggaatg cagggcgcat agtgtaatgc tttgctgccg ttgtgaccag tatgagcgtt	1140

<210> 461
 <211> 1560
 <212> DNA
 <213> Pseudomonas aeruginosa

<400> 461	
ccgccgtacg gtcgtcggcc tcaatgcagg gtgctgtcga tcagggtacc gcgcagcgag	60
tgcggcagcg cgtcgtcgat gtgcacctgg gcgaactggc cgatcaggcg tggattgtcg	120
cagcggaagt tgacgatccg gttgtttctcg gtgcgccccct ggagcatgcc tgggtccttc	180
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aaggagaagt cgaagccgac gtccctccacc agcttcatgg tctgctcgaa gtccttctcg	420
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tcggcgtggg cctggatcag cgcgtcggag aattccagcg ggtgcgaggt ggtatagcgg	660
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<210> 462
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 462
ythttygaag gdgcdcgaagg 20

<210> 463
<211> 19
<212> DNA
<213> Artificial sequence

<220>
<223> primer

<400> 463
grycwggmcc wactgagaa 19

<210> 464
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<220>
<221> misc_feature
<222> (3)..(3)
<223> n is a, c, g, or t

<400> 464
ccngccatyt cwccrcacat 20

<210> 465
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
 <223> primer
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 <400> 465
 amgaratgaa yccrttcytd gg 22

<210> 466
 <211> 20
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 <213> Artificial Sequence

<220>
 <223> primer
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 <400> 466
 gacggamyc tggagagacc 20

<210> 467
 <211> 23
 <212> DNA
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<220>
 <223> primer
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 gcartaytt dg tggccatwcc aaa 23

<210> 468
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<220>
 <223> primer
 .
 <400> 468
 garcgtatya tgaaaatggt 20

<210> 469
 <211> 17
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> primer
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 <400> 469
 catdccytca gdckcat 17

<210> 470

<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 470
tgggtygggyg gycgttact

19

<210> 471
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<220>
<221> misc_feature
<222> (9)..(9)
<223> n is a, c, g, or t

<400> 471
tcggytgng craagaagtt

20

<210> 472
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<220>
<221> misc_feature
<222> (5)..(5)
<223> n is a, c, g, or t

<400> 472
csacnatyat gacygaycc

19

<210> 473
<211> 20
<212> DNA
<213> Artificial sequence

<220>
<223> primer

<400> 473
tccatytcr t aytcyttcca

20

<210> 474
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 474
aayttggtrt acatraactg

20

<210> 475
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 475
rvtgatyatg cgytggct

18

<210> 476
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<220>
<221> misc_feature
<222> (4)..(4)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (13)..(13)
<223> n is a, c, g, or t

<400> 476
gccngggraad ccnacrat

18

<210> 477
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<220>
<221> misc_feature
<222> (3)..(3)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (6)..(6)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (9)..(9)
<223> n is a, c, g, or t

<400> 477
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20

<210> 478
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 478
gtgtaggtcc tacattcggtt tc

22

<210> 479
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 479
cattcgtttc aaaggtaatg

20